GENERAL COUNCIL
and
BOARD OF TRUSTEES

FISH AND WILDLIFE COMMITTEE

CONFEDERATED TRIBES
of the
Umatilla Indian Reservation
P.O. Box 638
PENDLETON, OREGON 97801
Area code 503 Phone 276-3018 FAX 276-3095

April 30, 2000

Department of the Army
Walla Walla District Corps of Engineers
ATTN: Lower Snake River Study
201 North Third Avenue
Walla Walla, WA 99362-1876
FAX: (509) 527-7832
E-mail: salmonstudy@usace.army.mil

Re: Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement

Dear Mr. or Ms.:

On behalf of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), we offer the following comments on the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (December 1999) (Draft FR/EIS) by the U.S. Army Corps of Engineers (Corps). Our comments incorporate by reference the comments of the Columbia River Inter-Tribal Fish Commission (CRITFC), submitted on behalf of the Columbia River Treaty Tribes.[1]

The CTUIR supports Alternative 4, Natural River Drawdown (Dam Breaching), as the preferred alternative to protect, recover and restore Snake River Basin salmon, steelhead, lamprey and other species.[2] We urge the Corps to adopt Alternative 4 as the preferred alternative.

---

[1] The Columbia River Treaty Tribes include the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Yakama Nation, and the Nez Perce Tribe. The four tribes possess rights reserved by treaties with the federal government to take a fair share of the fish destined to pass our usual and accustomed fishing places. Among these fish are the anadromous species that originate in the Columbia River and its tributaries, including the Snake River.

[2] In Alternative 4, the lower Snake River would be drawn down to natural levels by breaching the four Corps-owned and -operated dams (Ice Harbor, Lower Monumental, Little Goose and Lower Granite). The earthen portion of the dams would be removed, forming a channel around them and eliminating the

1 The paramount goal of the Draft FR/EIS and the preferred alternative that is ultimately selected should be the protection and enhancement of anadromous fish populations and their habitat so as to lead to sustainable, harvestable fish populations consistent with tribal Treaty Rights and the federal government's obligation to honor those rights and fulfill its Trust Responsibility toward tribal trust resources. The goal should not be merely de-listing currently listed species.[3] Through proper planning and wise policy choices, this goal can be achieved without unduly burdening non-Indian rights, interests, economic arrangements and social conditions.

Our comments are arranged in the following format:

I. Introduction

The CTUIR appreciates the opportunity to comment on the Draft FR/EIS, which the Corps has promised would be as fair, accurate and honest as possible.[4] We also appreciate the considerable time and effort you have expended on the Draft FR/EIS. Certainly the size and complexity of the issue justify the voluminous nature of the Draft FR/EIS and its associated appendices.

---

existing reservoirs, creating a 140-mile stretch of free-flowing river. This would eliminate existing reservoir-related and dam-passage mortality (for both juveniles and adults) and would accelerate salmon migration, more closely approximating natural conditions. Commercial navigation (as currently practiced) and hydropower production would end, and some irrigation activities would change. Recreation on and adjacent to the river would also change.

3 This goal should apply to all federal government management and planning processes affecting tribal rights, interests and resources.

4 *See, e.g.*, Bill Rudolph, *Corps Says Claims for Breaching Inaccurate*, NW Fishletter 77 (Mar. 17, 1999) < http://www.newsdata.com/enernet/fishletter/fishltr77.html#2> ("Brig. Gen. Robert Griffin, commander of the Corps' Northwestern Division, said his agency is committed to providing a factual report 'that identifies all of the effects, both positive and negative, on river resources and uses.'").

The examination and analyses of the engineering work required for the alternatives, the biological effects on salmon, steelhead, resident fish and wildlife, the effects on recreation, cultural resources and water quality, and the socioeconomic effects, including implementation costs and effects on navigation, irrigation and power generation, are suitably detailed and extensive. Nevertheless, with this letter we hope to identify some areas and make some suggestions that perhaps will better enable the documents to live up to your earlier promise.

The CTUIR takes promises very seriously. In exchange for a promise, our ancestors ceded to the United States over six million acres of land.[5] The Corps' Walla Walla District, and lands and waters occupied and affected by the four lower Snake River dams, include CTUIR-ceded lands. The promise, made to our ancestors nearly 150 years ago, was that our pre-existing, aboriginal rights would be secure, chief among them the right to fish.

II. Aboriginal Rights

Long before the construction of the Federal Columbia River Power System (FCRPS), before the expedition of Lewis and Clark, before the formation of the United States and the adoption of the U.S. Constitution, members of the Cayuse, Umatilla and Walla Walla Tribes used, occupied and enjoyed the lands and waters of what is now the Pacific Northwest. We fished, hunted and gathered plants, roots and berries as part of our place in the seamless circle of life.

2, 3, 4

Much later, in a effort to legitimize the subsequent invasion of the North American continent by European powers, the United States Supreme Court adopted the doctrine of discovery.[6] While discovery gave the Europeans and the United States, as the discovering nations' successor, "ultimate dominion" over the land, reasoned Chief Justice Marshall, it remained "subject . . . to the Indian right of occupancy."[7] Under this doctrine, Indians were recognized as the "rightful occupants" of the land, with a legal claim to possession.[8] This right to use, occupy and enjoy the land--and waters--came to be known as "Indian title" or aboriginal title.[9]

---

5 Federal government promises to tribes date back to at least the founding of the United States, including its first leader's commitment that "[t]he General Government will never consent to your being defrauded, but it will protect you and all your rights." George Washington, President of the United States, Dec. 29, 1790, in a statement in response to an address by the Chiefs and Councilors of the Seneca Nation, in 4 American State Papers (Indian Affairs, Vol. I, 1832) 142; 31 Washington, Writings (United States George Washington Bicentennial Comm'n. ed. 1939) 179, 180 (quoted in Federal Power Commission v. Tuscarora Indian Nation, 362 U.S. 99, 139, 80 S.Ct. 543, 4 L. Ed. 2d 584).

6 Johnson v. M'Intosh, 21 U.S. (8 Wheat.) 543 (1823).

7 *Id.* at 574.

8 *Id.*

9 *See, e.g.*, Sac and Fox Tribe of Indians of Okla. v. United States, 383 F.2d 991, 997 (Ct. Cl. 1967), *cert. denied*, 389 U.S. 900 (1967) ("[T]he right of sovereignty over discovered [sic] land was always subject to the right of use and occupancy and enjoyment of the land by Indians living on the land. This right of use

2, 3, 4 cont.

The discovery doctrine acknowledges that our aboriginal title is a property interest "as sacred as the fee simple of the whites."[10] The Indian right of use, occupancy and enjoyment can only be terminated by sovereign act.[11] Congress can extinguish aboriginal title only by a "clear and plain indication" of such an intent.[12] Only Congress, and not states, may do so.[13] Similarly, federal agencies have no power or authority to extinguish Indian title.

Aboriginal title encompasses aboriginal rights, such as the rights to fish and hunt.[14] Aboriginal rights of the CTUIR and our members to fish, hunt, and gather plants, roots and berries have existed since time immemorial. They are based on our customs and practices over millennia.[15] They are independent of aboriginal title to land, a treaty, or an act of Congress.[16] They were not superseded nor replaced by the rights specifically reserved by the CTUIR in the Treaty of 1855 with the United States. Our aboriginal rights are separate and distinct from, and coexist with, our Treaty Rights.

---

and occupancy by Indians came to be known as 'Indian title.' It is sometimes called 'original title' or 'aboriginal title.'").

10 United States ex rel. Hualpai Indians v. Sante Fe Pacific R.R., 314 U.S. 339, 345 (1941) (*citing* Mitchel v. United States, 34 U.S. (9 Pet.) 711, 746 (1835)).

11 *See, e.g.*, Oneida Indian Nation of New York State v. County of Oneida, 414 U.S. 661, 667 (1974).

12 Sante Fe, 314 U.S. at 353-54 ("[E]xtinguishment cannot be lightly implied in view of the avowed solicitude [sic] of the Federal Government for the welfare of its Indian wards.").

13 *See* Johnson v. M'Intosh, 21 U.S. (8 Wheat.) 543, 586 (1823) (discussing "the exclusive right of the United States to extinguish" Indian title); United States ex rel. Hualpai Indians v. Sante Fe Pacific R.R., 314 U.S. 339, 347 (1941) ("The power of Congress [to extinguish Indian title] is supreme.").

14 *See, e.g.*, United States v. Minnesota, 466 F. Supp. 1382, 1385 (D. Minn. 1977), *aff'd per curiam sub nom.*, Red Lake Band of Chippewa Indians v. Minnesota, 614 F.2d 1161 (8th Cir. 1980), *cert. denied*, 449 U.S. 905 (1980); State v. Coffee, 556 P.2d 1185 (Idaho 1976).

15 *See* F. Cohen, *Handbook of Federal Indian Law* 442 (1982).

16 Sante Fe, 314 U.S. at 347. Tribes possess extra fishing and hunting rights even when they are not delineated by specific treaties because subsistence fishing, hunting and gathering are intimately connected with how Indian lands are held. Menominee Tribe v. United States, 391 U.S. 404, 406 (1968). Aboriginal rights to fish and hunt incidental to aboriginal title may survive even when aboriginal title to the land has been ceded by treaty. Reynolds, *Indian Hunting and Fishing Rights: The Role of Tribal Sovereignty and Preemption*, 62 N.C. L. Rev. 743, 746 (1984).

2, 3, 4 cont.

Aboriginal rights retained by the CTUIR and our members must be recognized, respected and protected in the Corps' FR/EIS process and in its final outcome, pursuant to the federal government's Trust Responsibility. The Draft FR/EIS needs to properly consider aboriginal rights in identifying Indian Trust Assets, in assessing potential impacts to them, and in developing the range and analyses of actions and alternatives.

Aboriginal rights of the CTUIR and our members to fish, hunt, and gather plants, roots and berries, as part of our use, occupancy and enjoyment of the lands and waters of the Pacific Northwest, have not been altered by Congress. They have not--and cannot--be legally extinguished or diminished by any federal agency. Our aboriginal rights, like our Treaty Rights, remain valid and viable to this day, a fact that should given appropriate attention and due regard in the Draft FR/EIS and in decisions concerning the operation and configuration of the FCRPS.

III. The Treaty of 1855

5

The CTUIR includes the Cayuse, Umatilla and Walla Walla peoples. The relationship between the CTUIR and the United States was formally established by the Treaty of 1855.[17] Representatives of the federal government and my ancestors signed the Treaty. It is still in full force and effect, binding our two nations. Our Treaty is as important to us as the Constitution and the Bill of Rights are to you. In fact, the Constitution proclaims treaties to be "the supreme Law of the Land."[18] Together, they go hand-in-hand.

The tribes of the Columbia River Basin drew life and sustenance--food for our bodies and our souls--from Nch'i-Wana, "The Big River." We still do. We signed the treaties to protect and preserve our river, our fish, our people, and our way of life--in 1855, now, and forever. Without the guaranteed right to fish, the tribes would not have signed the treaties. Retaining the right to continue traditional fishing practices was a primary objective of the Columbia River Treaty Tribes during treaty negotiations.[19]

---

17 Treaty with the Walla Walla, Cayuse, and Umatilla, June 9, 1855, 12 Stat. 945, *reprinted in* 2 C. Kappler, *Indian Affairs: Laws and Treaties* 694 (1904). The other Columbia River Treaty Tribes signed similar treaties.

18 U.S. Const. art. VI, cl. 2 ("[A]ll Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding"). *See* United States v. Washington, 384 F. Supp. 312, 330 (W.D. Wash. 1974), *aff'd*, 520 F.2d 676 (9th Cir. 1975), *cert. denied*, 423 U.S. 1086 (1976). Treaties with Indian tribes are contemplated by this constitutional provision. *See, e.g.*, Worcester v. Georgia, 31 U.S. (6 Pet.) 515 (1832).

19 Tulee v. Washington, 315 US 681, 684-85 (1942).

5 cont.

Salmon, other fish, and the right to take them at "all usual and accustomed stations" remain vitally important to the CTUIR and its members. We have lived in harmony with salmon, and all the resources of our homeland, for thousands of years. However, salmon are now endangered and threatened because of non-Indian actions and activities, which have drastically changed and degraded our world and its environment. Throughout the region, individuals, businesses and governments have profoundly impacted salmon populations and their habitat, to the detriment of tribal rights and interests. This is contrary to the intent of our ancestors who signed the Treaty of 1855 to preserve and maintain our way of life, and harmful to the heritage we hope to pass on to our children.

IV. Tribal Salmon Initiatives

Responding to these circumstances, the CTUIR officially defined its position regarding many salmon recovery issues in 1995. In that year, we adopted our *Columbia Basin Salmon Policy*. It is a comprehensive statement of principles, with specific recommendations, addressing the entire salmon life cycle. It looks at all the "Four Hs" of salmon mortality--the hydrosystem, habitat in the tributaries, hatcheries, and harvest.[20]

6

Also in 1995, the four Columbia River Treaty Tribes, concerned over the loss of salmon and the erosion of our rights to them, came up with a plan to halt and reverse these trends--*Wy-Kan-Ush-Mi Wa-Kish-Wit (Spirit of the Salmon)*. It is a lengthy, detailed plan that also comprehensively examines all causes of salmon mortality. It also contains specific recommendations for reducing mortality and restoring fish.[21]

More recently, we developed an additional document entitled, *The Tribal Vision for the Future of the Columbia River Basin, and How to Achieve It*. It contains a tribal perspective on some of our difficult resource management issues, along with a list of specific measures for all four Hs.[22]

---

20 Confederated Tribes of the Umatilla Indian Reservation, *Columbia Basin Salmon Policy*, Mar. 8, 1995.

21 *Wy-Kan-Ush-Mi Wa-Kish-Wit (Spirit of the Salmon), The Columbia River Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs and Yakama Tribes* (1995).

22 *The Tribal Vision for the Future of the Columbia River Basin, and How to Achieve It* (July 15, 1999). The *Tribal Vision* was developed and submitted as part of the "Multi-Species Framework" process coordinated by the Northwest Power Planning Council. The *Tribal Vision* seeks to strike a balance between so-called "upriver" and "downriver" interests. It notes that all resources are connected, and that we, in turn, are tied to them. The distinction between "natural" and "cultural" resources, for example, is a false one. For the Treaty Tribes and others, salmon *are* a cultural resource. The *Tribal Vision* is also consistent with the thoughts expressed by the Alaska Department of Fish and Game regarding the potential for restoring fish above current mainstem blockages. *See* Office of the Commissioner, Alaska Department of Fish and Game, *Comments on the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement*, Mar. 30, 2000 <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/esr/deiscom.htm>:

6 cont. The Tribes have also publicly stated our aim of increasing naturally spawning adult salmon to 4 million in 25 years.[23]

V. Dam Breaching

Nearly five years before the federal government began to stress a comprehensive, "All H" approach, the CTUIR and the other Treaty Tribes did. We have long and consistently advocated a broad spectrum of gravel-to-gravel measures. We have already taken many positive steps to achieve recovery, sometimes helped, and sometimes hindered, by federal government policies and practices.

7, 8 Breaching the four Lower Snake River dams to benefit salmon is currently receiving the most attention, and is the subject of the Draft FR/EIS. The CTUIR agrees that dam breaching is not a "silver bullet." We have never claimed that it was. In many ways, it is unfortunate that it has created so much controversy.

Nevertheless, while providing certain benefits, the hydrosystem has taken an enormous toll on salmon and the tribal people who depend on them. Long experience, modern science and common sense all led us to the same conclusion on dam breaching in 1995, as stated in our *Columbia Basin Salmon Policy*:

> We support the staged, strategic modification or removal of dams, such as the lower four Snake River Dams . . ., coincident with development of a New Energy Plan for the region and implementation of aggressive energy conservation programs.[24]

ADF&G recommends that federal agencies adequately address fish passage at the Hells Canyon Complex, as well as the Complex's downstream impacts on listed salmon and steelhead, particularly Snake River fall chinook. While passage at Hells Canyon is important whether or not the four lower Snake River dams are retired, it is absolutely essential should the lower Snake River dams remain. There is broad agreement that the Hells Canyon Complex blocked access to 90 percent of the historic Snake River fall chinook spawning and rearing habitat. Attempts at providing passage, as required by the original project license, failed and were abandoned over 30 years ago. Federal agencies should revisit fish passage issues at Hells Canyon.

23 *Tribes demand 4 million salmon within 25 years*, Confederated Umatilla Journal, Feb. 2000. That number of fish within that time frame is intended to be *consistent with*, as opposed to *in satisfaction of*, tribal rights secured by treaties and executive orders.

24 Confederated Tribes of the Umatilla Indian Reservation, *Columbia Basin Salmon Policy* 12 (Mar. 8, 1995).

The CTUIR supports natural river level drawdown of the lower Snake River by removing the earthen embankments at Ice Harbor, Lower Monumental, Little Goose and Lower Granite dams. The four lower Snake River dams must be partially removed to prevent further extinctions of Snake River salmon. The Columbia River Treaty Tribes also reached the same conclusion endorsing dam breaching five years ago:

> The tribes' preferred alternative for Snake River Dam drawdown would require structural modifications at Lower Granite, Little Goose, Lower Monumental, and Ice Harbor dams to allow for drawdown to natural river level. Drawdown to natural river level is generally intended to restore flows to the water surface elevations that existed in the Snake River prior to impoundment.[25]

7, 8 cont.

In the past, the tribes have fought for strong actions in the other three, non-hydrosystem Hs. Time and time again, however, we have run into roadblocks, or a brick wall, from some federal agencies. After many years and much frustration, we have been left with no choice but breaching. We wish that breaching was not necessary, but overwhelming, reliable, independent evidence suggests that it is.[26]

9

Breaching alone is not enough. But all other measures combined, without breaching, will not be enough. Partial removal of the four dams is an essential component of any effort to effectively protect and restore Snake River fish. Breaching is necessary to eventually de-list salmon under the Endangered Species Act. It is necessary to rebuild and restore the runs *and their habitat*

---

25 *Wy-Kan-Ush-Mi Wa-Kish-Wit (Spirit of the Salmon), The Columbia River Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs and Yakama Tribes* 5B-30 (1995).

26 *See, e.g.*, Letter from Stephen Mealey, Director, Idaho Fish and Game Department, to Donald Chapman, Ph.D. (Oct. 31, 1997) ("As for the merits of dam breaching, the Department believes it is biologically clear that wild Snake River salmon and steelhead will do better in a free flowing river than in a series of dams and reservoirs. Of the long-term recovery options currently considered, we are increasingly confident that breaching the four lower Snake River dams is the option most likely to restore Idaho's wild salmon and steelhead."); Donald Chapman, Congressional Testimony (quoted in Idaho Department of Fish and Game, *Idaho's Anadromous Fish Stocks: Their Status and Recovery Options* 17 (May 1, 1998)) ("[I]f we want to go back to the harvestable runs of the 1950s, 45 years ago, there is only one way to do that: take out four lower Snake River dams . . . [T]hat is the only way to do it. We are not going to get there by tweaking the system."); Idaho Statesman (Boise, ID), Dec. 30, 1998 ("A growing consensus of scientists says Idaho's salmon and steelhead will go extinct if dams on the Columbia or Snake rivers aren't breached."); *See generally* Blumm, et al., *Saving Snake River Water and Salmon Simultaneously: The Biological, Economic, and Legal Case for Breaching the Lower Snake River Dams, Lowering John Day Reservoir, and Restoring Natural River Flows*, 28 Envtl. L. 997 (1998) ("In this article, the authors comprehensively review the major scientific and economic studies on breaching the lower Snake River dams and conclude that this option is not only scientifically sound, but also economically affordable. In fact, they assert that dam breaching may prove to be less costly, both economically and socially, for upriver economic interests than attempting to improve the current restoration program.").

7, 8, 9 cont.

leading to sustainable, harvestable salmon populations consistent with tribal Treaty Rights and the federal government's Trust Responsibility to the tribes.

VI. Support for Breaching

In the more than five years since the CTUIR adopted its formal *Policy* and its position supporting dam breaching, further scientific findings have only confirmed the validity of our stance. Salmon need healthy habitat, and mainstem rivers are habitat. Breaching is habitat restoration, and with it will come salmon restoration.[27] It is no coincidence that the healthiest remaining fall chinook salmon population is in the Hanford Reach, the last remaining undammed stretch of the Columbia and Snake Rivers.

Since 1995, dam breaching as an essential recovery measure has received much significant additional scientific and other support:

- The National Marine Fisheries Service

Views on breaching from the National Marines Fisheries Service have been diverse, to say the least. Yet at times even the obvious becomes inescapable. According to one NMFS official,

> [T]the most current modeling shows that drawing down the river to its pre-dam level by breaching dams would lead to higher survivals for spring and summer chinook than improving fish transportation.[28]

- The U.S. Fish and Wildlife Service

The CTUIR agrees with the conclusion in the U. S. Fish and Wildlife Service's Coordination Act Report[29] that dam breaching would provide the most benefits to fish and wildlife, including anadromous fish species listed as threatened or endangered.[30] The agency found that Alternative

---

27 While touting the need for watershed restoration, the federal government seems reluctant to admit that the mainstem is (or was) salmon habitat, at the heart of a single great watershed, once the richest on earth in terms of salmon productivity. *See U.S. officials want salmon protected*, Tri-City Herald (Kennewick, Pasco, Richland, WA), Feb. 27, 1998 ("Our salmon populations are sick because our watersheds are sick. We won't recover the salmon until we recover the health of the watersheds that are their home.") (quoting William Stelle, NMFS Regional Administrator).

28 NW Fishletter, Nov. 25, 1998 (citing NMFS representative Tom Cooney).

29 U.S. Fish and Wildlife Service, Draft FR/EIS, Appendix M, Fish and Wildlife Coordination Act Report M10-1 - M10-12 (Dec. 1999).

30 U.S. Fish and Wildlife Service, Draft FR/EIS, Appendix M, Fish and Wildlife Coordination Act Report M10-1 (Dec. 1999) ("It is clear in our assessment that the Natural River Drawdown Alternative would provide many more benefits to fish and wildlife and their habitats than the other three alternatives

4 "would best increase survival of juvenile anadromous fish migrating through the area of the four lower Snake River dams,"[31] "would significantly increase the area of spawning and rearing habitat for Snake River fall chinook, a threatened species,"[32] "is the only alternative that addresses restoration of natural or near natural riverine conditions that would produce a myriad of positive influences on natural processes and fish and wildlife,"[33] is the only alternative that addresses lamprey and white sturgeon passage and migration needs,[34] and would "improve water quality."[35]

- The U.S. Environmental Protection Agency

10 The U.S. Environmental Protection Agency (EPA) has seriously questioned the merits of Alternatives 1, 2 and 3, the non-breaching alternatives in the Draft FR/EIS, calling them "unacceptable."[36] It has stated that the four lower Snake River dams degrade water quality and

---

in the area of the four lower Snake River dams."). *See also* Brent Hunsberger, *Dams hurt river quality, the EPA says*, The Oregonian, Apr. 28, 2000 <http://www.oregonlive.com/news/oregonian/index.ssf?/news/oregonian/00/04/lc_61epa28.fram> ("The U.S. Fish and Wildlife Service late last year [1999] said breaching the four dams would be the best way to restore ecological health in the Snake River.").

31 U.S. Fish and Wildlife Service, Draft FR/EIS, Appendix M, Fish and Wildlife Coordination Act Report M10-1 (Dec. 1999).

32 *Id.*

33 *Id.*

34 *See* U.S. Fish and Wildlife Service, Draft FR/EIS, Appendix M, Fish and Wildlife Coordination Act Report M10-9, 12 (Dec. 1999).

35 Draft U.S. Fish and Wildlife Service, Draft FR/EIS, Appendix M, Fish and Wildlife Coordination Act Report M10-12 (Dec. 1999).

36 *See* Brent Hunsberger, *Dams hurt river quality, the EPA says*, The Oregonian (Portland, OR) , Apr. 28, 2000 <http://www.oregonlive.com/news/oregonian/index.ssf?/news/oregonian/00/04/lc_61epa28.fram>:

> The U.S. Environmental Protection Agency told the U.S. Army Corps of Engineers Thursday [April 27, 2000] that four lower Snake River dams harm river quality, threaten endangered salmon and might best be breached to comply with the federal Clean Water Act. The EPA found the corps' $20 million, four-year study of ways to improve salmon survival inadequate, according to an agency letter . . .. It called the corps' three proposed alternatives to dam breaching "unacceptable" and found that, in the absence of more analysis, breaching loomed as the best way of restoring health to the Snake River. [Chuck Clarke, EPA Regional Administrator, said that the Corps had failed to deal with water quality in any alternative.] Doug Arndt, chief of the corps' fish management division, said the EPA's sharp comments took the agency by surprise, because it based its environmental assessment on protecting salmon and not on overall river health. [Restoring "overall river health" is essential to "protecting salmon," in the CTUIR's

10 cont.

threaten salmon. It has suggested that breaching would be the best means to eventually comply with the federal Clean Water Act. EPA contends "that dams, by pooling water, elevate water temperatures beyond levels considered safe for young, migrating salmon."[37] (Alternative 4 would improve water quality in the lower Snake River, would require less cooling water from Dworshak Reservoir, and thus would enhance normative conditions for listed anadromous fish in the lower Clearwater River, as well as in the lower Snake River.)

- The Independent Scientific Group

In 1996, The Independent Scientific Group (ISG) released its landmark study, *Return to the River*.[38] The report called for "normative river conditions," or the restoration of ecological processes consistent with the needs of native fish and wildlife species. The authors faulted

---

estimation.] The EPA is the second federal agency to raise questions about the dams. . . . Last month, . . . a federal judge ruled the corps must manage the dams in compliance with the Clean Water Act. . . . [O]bservers say the EPA ruling will make it difficult for the corps to argue that the dams don't adversely affect water quality. . . . Water temperatures higher than 68 degrees can harm salmon and make them more vulnerable to disease, scientists say. High levels of dissolved gases, such as nitrogen, can create in fish a condition similar to the bends. . . . [A] 1998 analysis by the EPA found that the dams nearly double intensity and duration of temperature violations. Altering the dams to reduce water temperatures . . . could cost hundreds of millions of dollars and hit taxpayers, electric ratepayers and farmers. Such strategies could include reducing irrigation withdrawals by Idaho and Washington farmers to speed water flows downriver and to limit the time water spends warming behind the dams. It also could include retrofitting the dams so they draw cool water from their reservoirs' depths. In its draft environmental impact statement, the corps declared that the Snake River's water temperatures had cooled since it built four dams in the 1960s and 1970s and turned the formerly free flowing river into a series of reservoirs. EPA's review found that conclusion "flawed and misleading." The EPA said the corps' selective use of data and study manipulations led to a false and insupportable conclusion. The EPA said the corps used imprecise temperature readings made by eye from a thermometer that measures water entering dam turbines. But it ignored electronic measurements of temperatures taken on either side of each dam, the EPA said. Using those measurements, the EPA found temperatures at Ice Harbor Dam exceeded Washington's standard for more than 83 days on five occasions since 1980. Temperatures at Lower Granite Dam exceeded state limits for more than 85 days on two occasions. By comparison, the EPA found that temperature readings taken at Sacajawea, Wash., in 1956 exceeded today's standards for 66 days.

See also EPA takes issue with corps salmon study: Agency says breaching dams might be the best way to improve water quality, The Spokesman-Review (Spokane, WA), Apr. 29, 2000 <http://www.spokane.net/news-story.asp?date=042900&ID=s796921>.

37 Brent Hunsberger, *Dams hurt river quality, the EPA says*, The Oregonian (Portland, OR) , Apr. 28, 2000 <http://www.oregonlive.com/news/oregonian/index.ssf?/news/oregonian/00/04/lc_61epa28.fram>.

38 The Independent Scientific Group, *Return to the River: Restoration of Salmonid Fishes in the Columbia River Ecosystem* (1996).

salmon recovery efforts for relying on failed technological fixes like artificial transportation, suggesting that it was doubtful whether technology could ever substitute for a natural river system.

- The Idaho Fish and Game Commission

The Idaho Fish and Game Commission supports Natural River Drawdown (Dam Breaching):

> [T]he mainstem dam and reservoir system in the lower Snake and Columbia rivers is the primary factor limiting recovery of Idaho's wild salmon and steelhead. The smolt transportation program has not compensated for this limiting factor to date. . . . [T]he Commission considers the "natural river option" to be the best biological choice among the 1999 Decision Point options for recovery of Idaho's wild salmon and steelhead. Available information indicates that the natural river option is the only option that can meet Commission recovery standards, defined as a normative river providing 2-6% smolt-to-adult survival for inriver migrants.[39]
>
> The Idaho Fish and Game Commission has found the best *and only* way to achieve the survival needed for recovery is to create a more natural river by removal of the four lower Snake River dams.[40]

- The Idaho Department of Fish and Game

The Idaho Department of Fish and Game supports Natural River Drawdown (Dam Breaching):

> [T]he natural river option is the best biological choice for recovering salmon and steelhead in Idaho. This assessment is logical, biologically sound, has the highest certainty of success and lowest risk of failure, and is consistent with the preponderance of scientific data. . . . The natural river option is the only option considered in the 1999 Decision Point that can provide recovery . . ..[41]

---

39 Idaho Fish and Game Commission, *Policy Statement*, May 8, 1998.

40 Idaho Fish and Game Commission, *News Release* (May 29, 1998) (emphasis added). *See also Let's make sure this sockeye isn't the last at Redfish Lake*, Idaho Statesman (Boise, ID), Aug. 25, 1998 ("Many top scientists and the Idaho Fish and Game Commission agree that a more natural river would be effective in restoring salmon and steelhead to Idaho. Breaching -- removing the earthen portion of the dams, leaving the concrete powerhouses and other structures in place -- could restore a natural river.").

41 Idaho Department of Fish and Game, *Idaho's Anadromous Fish Stocks: Their Status and Recovery Options* 16-17 (May 1, 1998).

The then-Director of the Department wrote in 1997:

> As for the merits of dam breaching, the Department believes it is biologically clear that wild Snake River salmon and steelhead will do better in a free flowing river than in a series of dams and reservoirs. Of the long-term recovery options currently considered, we are increasingly confident that breaching the four lower Snake River dams is the option most likely to restore Idaho's wild salmon and steelhead.[42]

- The Alaska Department of Fish and Game

The Alaska Department of Fish and Game supports Alternative 4, Natural River Drawdown (Dam Breaching), as the preferred alternative, stating that:

> The fundamental conclusion of the Draft FR/EIS, the National Marine Fisheries Service's modeling analyses (Process for Analyzing and Testing Hypotheses, PATH and Cumulative Risk Initiative, CRI), and the U.S. Fish and Wildlife Service Coordination Act Report is the same: in order to recover the Snake River fall chinook, spring/summer chinook, sockeye, and steelhead, breaching the dams must be a part of the solution. Furthermore, action to recover these fish is needed now. The December 1999 CRI model highlights the real risk of extinction to spring/summer chinook (significant risk of extinction within the next 10 years) from any plan that delays action. More recent information concludes that the December CRI understates the risk. . . . Based on the information supplied in the Draft FR/EIS and its many appendices, and the All-H paper, ADF&G would support a variation on Alternative 4 that included breaching the dams, implementation of the PST agreement, habitat restoration programs, and improving water quality and quantity. We see such an alternative as the only way to meet the ESA requirements for listed Snake River fish. The other alternatives are most likely to not meet ESA requirements and eventually force Congress to make exceptions to the ESA. Furthermore, if an alternative involving breaching the dams is selected, ADF&G urges the federal agencies to mitigate the short-term impacts on fish and wildlife, and the short and long-term impacts on people who live in the affected areas.[43]

11

The CTUIR agrees with the official comments submitted by the Alaska Department of Fish and Game in support of Alternative 4:

---

42 Letter from Stephen Mealey, Director, Idaho Fish and Game Department, to Donald Chapman, Ph.D. (Oct. 31, 1997).

43 Letter from Frank Rue, Commissioner, Alaska Department of Fish and Game, to Brig. General Robert H. Griffin, Division Engineer, U.S. Army Corps of Engineers, Mar. 30, 2000 <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/csr/deislet.htm>.

11 cont.

ADF&G believes a modified Alternative 4 is the best alternative for increasing survival of juvenile anadromous fish in the lower Snake River. Alternative 4 as presented falls short of meeting the Endangered Species Act requirements for the listed Snake River chinook, sockeye, and steelhead. The Final FR/EIS should address additional habitat and water required for their recovery. ADF&G believes that a modified Alternative 4 should reestablish the river habitat that scientists (Independent Scientific Group, U.S. Fish and Wildlife Service, Oregon Department of Fish and Wildlife, Idaho Department of Fish and Game, and the Columbia River Inter-Tribal Fish Commission) say is essential to restoring Snake River anadromous fish populations. The benefits to Snake River salmon and steelhead from a river habitat rather than a dam and reservoir habitat include:

- Significantly increased area of spawning and rearing habitat for Snake River fall chinook.
- Improved juvenile migration conditions for Snake River salmon and steelhead, including closer to natural water temperatures, decreased predation, faster in-river migration, (PATH estimates this alternative has the potential to about double the survival of juvenile salmonid migration)
- Reduced downstream migration mortality and injuries from turbines, handling, and bypass systems
- Improved upstream migration for adult salmon. Unlike questions surrounding juvenile fish mortality (delayed mortality) the factors contributing to upstream migration mortality are known: delayed passage, large volumes of spill, no spill, fallback, and high water temperatures. NMFS estimates that about 39 percent of adult fall chinook, 21 percent of the spring/summer chinook, and 15 percent of the sockeye are currently lost during passage through the eight dam and reservoir projects in the lower Columbia and Snake Rivers. Decreasing this adult mortality could significantly affect survival and recovery of these fish stocks
- Improved conditions for other native species of fish and wildlife in the Snake River basin by providing near-natural habitat
- Introduced species, including significant predators of juvenile salmon, would be disadvantaged.[44]

---

44 Office of the Commissioner, Alaska Department of Fish and Game, *Comments on the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement*, Mar. 30, 2000 <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/esr/deiscom.htm>. *See also* Testimony by Frank Rue, Commissioner, Alaska Department of Fish and Game, to the Federal Agency Caucus On the Recovery of Snake River and Columbia River Salmon, Petersburg, Alaska, Mar. 9, 2000 <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/esr/ruetest.htm>:

> In the Draft Environmental Impact Statement on the Lower Snake River the Corps did not designate a preferred alternative. However, the US Fish and Wildlife Service was clear: only the restoration of a natural river ecosystem, including a healthy riparian corridor would provide those mitigation measures most important to anadromous fish. The Department of Fish and Game supports their analysis of the impacts of the various alternatives on Snake River salmon and agrees that removing portions of the dams, the Natural River Drawdown Alternative, is the

- The Process for Alternative Testing of Hypotheses

The group of scientists involved in the Process for Alternative Testing of Hypotheses (PATH) estimated an 80 percent probability that bypassing the four dams would recover spring and summer chinook and a 100 percent probability that it would recover fall chinook. Other options examined, including intensified fish barging, ranged from a 30 to 50 percent probability of recovery.[45] The work by PATH has been the subject of intense examination and scrutiny,[46] but it remains one of the most thorough and extensive of its kind.[47]

---

best alternative for anadromous fish. The Corps' five-year study says that breaching the dams offers the best chance to restore fish populations to healthy levels. It also notes that the other alternatives presented offer only about a 50-50 chance of success and are "much less likely to yield recovery." The US Fish and Wildlife Service notes that the Maximum Transport Alternative would have little, if any, effect on the listed fish populations because the percentage of fish presently transported is already high. They also note that the Surface Bypass/Collection Alternative would have little, if any, effects on the listed fish populations. Again, our review of the many documents persuaded us that this is true. . . . I want to make it perfectly clear that as far as Snake River salmon fisheries are concerned, harvest is already fulfilling its role and further cuts will not get us closer to Snake River salmon recovery. You must look to the other H's to recover these fish. Further harvest restrictions are not a viable option to recover these salmon. Such actions would not recover fall chinook and would do nothing for the other species, spring/summer chinook, sockeye, and steelhead. . . . The continued discussion of further harvest reductions for Snake River salmon is a waste of time simply because not much progress toward recovery can be made through further reductions. Rather federal agencies should move on to what the science shows may best help recover these stocks: breaching dams, habitat restoration, and augmented flows. . . . It is as clear as an unobstructed stream, that the dominant cause of mortality for all salmon populations in the Columbia River system, including the Snake River fall chinook, is the web of dams that have so changed the watershed as to make spawning, rearing and migration a lethal experience for anadromous fish. The biological opinion on the hydropower system, adopted by the National Marine Fisheries Service in 1995, acknowledged this by permitting the dams to kill from 62-99 percent of the migrating smolt and 39 percent of the returning adult salmon. I urge the federal agencies to move forward with a real recovery effort for the ESA listed fish in the Snake and Columbia River without delay. Viable solutions have been presented that include removing the earthen parts of the four lower Snake River dams, habitat recovery, and increased water flows. The position of the Department of Fish and Game, however, is clear: the best chance for recovery of these fish is a return to the natural river.

45 *See* NW Fishletter 71, Nov. 25, 1998 (PATH scientists found that "the higher bar of achieving the 48-year recovery standard could be reached in 80 percent of the simulations by breaching the dams, nearly twice as much than predicted for the other two [non-breaching] scenarios."); *See also* Idaho Statesman (Boise, ID), Dec. 30, 1998 ("Another group of 22 scientists brought together by federal authorities to seek a common position on salmon [PATH] said . . . that breaching four dams on the Snake River in Washington was the only option under study that could recover the fish."); *Breaching doubles odds of fish survival; Scientists say removing parts of four lower Snake dams is best bet for the fish*, Lewiston Tribune (Lewiston, ID), Dec. 11, 1998 ("The [PATH] report concludes that breaching the four federally owned lower Snake River dams -- by removing portions to allow the river to flow unimpeded -- improves chances of restoring threatened and endangered fish populations by nearly 2-to-1 over the increased use of barges to ferry fish around dams."); *Study likely to support breaching Snake dams*, Tri-

- The Multi-Species Framework[48]

- The American Fisheries Society

By a unanimous vote of 103 to 0, the Oregon Chapter of the American Fisheries Society endorsed breaching the four lower Snake River dams, stating, in part:

City Herald (Kennewick, Pasco, Richland, WA), Dec. 10, 1998 ("[R]emoval of major portions of all four dams on the lower Snake has a 100 percent chance of allowing fall chinook to meet all three recovery standards set by the National Marine Fisheries Service, the [PATH] study found. By comparison, maximizing the amount of barged fish only has a 15 percent chance of working for fall chinook . . ..").

46 *See More Polarization Over PATH Process*, NW Fishletter 73, Jan. 5, 1999 ("[T]he Weight of Evidence Panel . . . gave more credibility to the states' and tribes' salmon passage model than BPA's own $5 million CRiSP model. The four scientists on the panel found more empirical evidence for the flow/survival relationship in the FLUSH model, little evidence that climate change had much of an effect on the stocks, and agreed with the FLUSH model's hypothesis that passage through the hydro system caused mortality in salmon once they were beyond the river."); *Kitzhaber Takes on BPA Over PATH Gripes*, NW Fishletter 71, Nov. 25, 1998 ("The four scientists [on the "Weight-of-Evidence," or Scientific Review Panel (SRP)] who reviewed evidence for major uncertainties used in two computer models judged that the state agencies' and tribes' FLUSH model fitted empirical data better than the CRiSP model developed by University of Washington scientists.").

47 *See, e.g.*, Columbia Basin Bull., Jan. 29, 1999 ("Doug DeHart, Director of Fisheries [for Oregon Department of Fish and Wildlife], discussed the PATH report and its conclusions, saying that as a biological decision analysis, the report is scientifically sound, credible, comprehensive, objective and conclusive. 'I believe this biological decision analysis is the best of its kind and must be considered to be part of the final decision. Recovery will only occur under options that approach the natural river,' DeHart concluded."). In response to some questioning of PATH's work, Governor Kitzhaber responded as follows:

> PATH scientists recently completed the most scientifically rigorous and credible analysis to date of how listed Snake River spring and summer chinook may respond to changes in the FCRPS. The analysis reflects input from all PATH scientists and has been evaluated by a panel of expert scientists with no vested interests in the outcome. . . . One important piece of information provided by the WOE [Weight of Evidence] Report is that *listed salmon are most likely to survive and recover if the four federal dams in the lower Snake River are breached.* Another, and equally important piece of information, is that *breaching the dams is the only scenario where the likelihood of recovery meets the jeopardy standard established by the National Marine fisheries Service.*

Letter from John Kitzhaber, Governor, State of Oregon, to Judi Johansen, Administrator and CEO, Bonneville Power Administration (Nov. 5, 1998) at 2 (emphasis added).

48 *See Study recommends breaching 4 dams*, The Oregonian (Portland, OR) , at C4

Whereas: Recent scientific reviews, including those conducted as part of the Independent Scientific Advisory Review process, the collaborative and peer-reviewed Plan for Analyzing and Testing Hypotheses, and the Fish and Wildlife Coordination Act report on the Corps of Engineers Lower Snake River Juvenile Salmon Migration Feasibility Study Environmental Impact Statement have all indicated that restoration of natural river conditions where the lower four Snake River dams occur has the highest likelihood of preserving and recovering listed salmon and steelhead and poses the least risk to survival;

Whereas: Failure to restore Snake River salmonids to sustainable, fishable levels threatens to put the federal government in a position of failing to meet its Treaty Trust responsibilities; . . .

Therefore be it resolved that, based on the best scientific information available, it is the position of the Oregon Chapter of the American Fisheries Society that:

- The four lower Snake River dams are a significant threat to the continued existence of remaining Snake River salmon and steelhead stocks;
- If society-at-large wishes to restore these salmonids to sustainable, fishable levels, a significant portion of the lower Snake River must be returned to a free-flowing condition by breaching the four lower Snake River dams, and that this action must happen soon[49]

This followed a similar vote last year by the Western Division of the same organization in support of breaching:

Whereas: Dramatic action must be taken soon to prevent some, or perhaps even most remaining Snake River salmon and steelhead stocks from extinction;

Whereas: Recent scientific reviews, including those conducted as part of the Independent Scientific Advisory Review process and the Plan for Analyzing and Testing Hypotheses, have indicated that restoration of natural river conditions where the lower four Snake River dams occur has the highest likelihood of preserving and recovering listed salmon and steelhead and poses the least risk of unanticipated side-effects;

Whereas: The U.S. Fish and Wildlife Service Lower Snake River Compensation Plan Office, charged with compensating for salmon and steelhead losses associated with mortality caused by the four lower Snake River dams, has concluded it cannot meet its salmon compensation objectives; . . .

---

49 Oregon Chapter, American Fisheries Society, *Resolution of the Oregon Chapter of the American Fisheries Society on Snake River Salmon and Steelhead Recovery*, Feb. 17, 2000 <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/esr/afs_reso.htm>. *See Scientists pretty much agree about dam breaching*, The Oregonian (Portland, OR), Mar. 26, 2000 (reader opinion by Dave Holder, President, Oregon Chapter, American Fisheries Society).

Therefore be it resolved that: Based on the best scientific information available, it is the position of the Idaho Chapter of the American Fisheries Society that the four lower Snake River dams are a significant threat to the continued existence of remaining Snake River salmon and steelhead stocks;

Let it be further resolved that: If society-at-large determines that Snake River salmon and steelhead are to be restored or recovered in their native ecosystem, then one biologically required action is to eliminate or greatly reduce impacts to salmon and steelhead from the four lower Snake River dams by removing, breaching, or bypassing the dams, or otherwise allowing the lower Snake River to flow freely, without impoundment . . ..[50]

- Over 200 Fisheries Scientists

In March, 1999, over 200 fisheries scientists wrote to President Bill Clinton, imploring his Administration to take action to protect and preserve anadromous fish in the Snake River Basin, and serious consider partial removal of the lower Snake River dams, stating in part:

> We, the undersigned scientists, are gravely concerned that current measures to recover Columbia basin salmon and steelhead are falling far short of what is needed to avert widespread extinctions in the near future. We are especially concerned that the current management approach appears to be fixed on a path of technological solutions instead of a return to more normative river conditions. The former path is a dangerous one that is likely to send several depressed stocks into extinction over the next few decades. The situation is particularly acute in the Snake River basin, where over the last thirty years wild salmon and steelhead runs have declined by nearly 90 percent following the construction of four federal dams on the Lower Snake River. Today, every native run of salmon and steelhead in the Snake River basin either is already extinct or listed for protection under the federal Endangered Species Act. . . . Barging and trucking of juvenile migrants began experimentally more than 20 years ago in an attempt to mitigate for the effects of a river system made lethal by the Federal Columbia River Power System. Since its inception, the transportation program has never sustained the minimum smolt-to-adult survival rate that is needed to begin rebuilding wild Snake River salmon and steelhead stocks. It has failed even to halt their decline. Every independent scientific analysis on this subject since the landmark 1996 Return to the River report by the Independent Scientific Group (ISG) has concluded that juvenile fish transportation in the Columbia-Snake river system is a failed practice that should be phased out in lieu of a return to more normative river conditions. The most comprehensive PIT-tagging study to date now shows that even with technological advances, the transportation program has failed to produce the minimum survival rate that is required to begin rebuilding wild Snake River salmon and steelhead stocks. The most recent data indicates that a five to

12

50 Western Division, American Fisheries Society, *Resolution of the Western Division of the American Fisheries Society On the Role of Dams and Snake River Salmon and Steelhead Recovery* (July 13, 1999 <http://www.fisheries.org/wd/news/1999/Resolution_dams_snake_river_salmon_steelhead.htm>.

12 cont.

> fifteen-fold increase in survival rates is needed in order to meet NMFS recovery goals. There is building scientific consensus that the surest way to restore wild Snake River salmon and steelhead runs is to reclaim a 140-mile-long reach of their migration corridor by bypassing four dams on the Lower Snake River. . . . According to the PATH (Plan for Analyzing and Testing Hypotheses) scientific group, . . . the natural river option is the only recovery action that has a high likelihood of restoring wild Snake River salmon and steelhead runs to healthy levels. The Idaho Department of Fish and Game calls the natural river option "the best biological choice for recovering salmon and steelhead in Idaho," saying it is "logical, biologically sound, has the highest certainty of success and lowest risk of failure, and is consistent with the preponderance of scientific data." The natural river option is the only recovery strategy under consideration that is consistent with the normative river principles outlined in Return to the River. . . . If these runs are allowed to vanish, the foundation of the Interior Northwest's ecosystems will be severely undermined. The weight of scientific evidence clearly shows that wild Snake River salmon and steelhead runs cannot be recovered under existing river conditions. Enough time remains to restore them, but only if the failed practices of the past are abandoned and we move quickly to restore the normative river conditions under which these fish evolved. . . . Biologically, the choice of how to best recover these fish is clear, and the consequences of maintaining the status quo are all but certain.[51]

There have been many further endorsements and favorable statements regarding dam breaching.

- Oregon Governor John Kitzhaber

Governor Kitzhaber has expanded on his earlier pronouncement that bypassing the dams to benefit salmon was a "biological no-brainer"[52] in an extended speech, stating:

> This is not about sacrificing economic benefits for environmental health -- it is about working together as a region to have both. It is about striking a victory for regionalism over parochialism. To quote Wallace Stegner, it is about "outliving our origins" and "building a society to match our scenery." I believe that one way to accomplish that and to equitably spread the economic burden is to build a recovery strategy that includes breaching the four Lower Snake River dams.[53]

- Alaska Governor Tony Knowles

---

51 "Scientists' Letter to President Bill Clinton" (Mar. 22, 1999) <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/esr/scientst.htm>.

52 Gov. John Kitzhaber, *Governance and the Columbia River* Conference, Portland, Oregon (Oct. 15, 1998).

53 Gov. John Kitzhaber, Speech to the Annual Meeting of the Oregon Chapter of the American Fisheries Society, Eugene, Oregon (Feb. 18, 2000) <http://www.governor.state.or.us/governor/speeches/s000218.html>.

In official testimony to the Federal Caucus, Governor Knowles stated:

> The sad truth is that National Marine Fisheries Service now believes Snake River chinook salmon migrating to the sea are safer in a barge or in trucks on the highway than they are in a river that has been transformed from a natural watershed into an industrial machine. If there is commitment to restore salmon in the rivers, the only presented scientific option is to restore the rivers of the Northwest to a natural condition. This is the only way to assure recovery of these stocks, and it is the only option that satisfies the requirements of the new Pacific Salmon Treaty agreements on habitat and safe passage. This is no small challenge for the Nation and Northwest, as the Columbia and Snake Rivers have become a virtual "killing field" for salmon. The National Marine Fisheries Service (NMFS) allows the federal dams on the Columbia and Snake Rivers to kill 62-99 percent of the juvenile Snake River fall chinook and nearly 40 percent of the adults. Oregon biologists estimated the dams are responsible for up to 93 percent of total mortality on Snake River fall chinook. Alaska biologists note 70 percent of the river miles between the ocean and the spawning grounds for these fish have been converted to reservoirs. . . . Scientists in the Pacific Northwest increasingly point to the four lower Snake River dams as a critical part of the problem, and the only lasting solution. The Oregon Chapter of the American Fisheries Society, the number one professional fisheries management organization in the area, states: "If society-at-large wishes to restore these salmonids to sustainable, fishable levels, a significant portion of the lower Snake River must be returned to a free-flowing condition by breaching the four lower Snake River dams." Our own Alaska Department of Fish and Game biologists confirm that assessment is sound, as do biologists from the U.S. Fish and Wildlife Service. Over 500 Alaska commercial fishermen and several Alaska sport and commercial fishing organizations have already joined the American Fisheries Society in support of bypassing the four lower Snake River dams.[54]

- The Affiliated Tribes of Northwest Indians

The Affiliated Tribes of Northwest Indian, a regional coalition of 49 sovereign tribal governments, passed a resolution supporting Natural River drawdown:

> [T]he Affiliated Tribes of Northwest Indians calls for restoring essential natural river features in part by means of drawdowns--specifically, drawdown of the four Lower Snake River dams to natural river level . . ., as recommended in *Wy-Kan-Ush-Mi Wa-Kish-Wit* (Spirit of the Salmon)--as the best, and perhaps only, means to prevent the ultimate

---

54 Testimony by Alaska Governor Tony Knowles, State of Alaska, To the Federal Agency Caucus On the Recovery of Snake River and Columbia River Salmon, Juneau, Alaska, Mar. 8, 2000 <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/esr/govtest.htm> (Presented by David Benton, Deputy Commissioner, Alaska Department of Fish & Game).

extinction of endangered Snake River salmon and other species of critical importance to the ATNI member tribes' economy, culture, religion and way of life.[55]

- Cities and municipalities

Cities such as Astoria, Oregon, and Pelican, Alaska, have endorsed breaching the lower Snake River dams.

- Newspapers

A number of newspapers, both within and outside the region, have taken positions in favor of breaching, including the Idaho Statesman, for example:

> Thousands of adult sockeye used to return to Redfish Lake every year . . . to reproduce and die. These days, however, the word 'Redfish' is not so much descriptive as it is symbolic of better days. Why? Four dams on the lower portion of the Snake River in Washington are the primary reason that the numbers of fish have plummeted so alarmingly in the past two decades. Breaching those four dams is the best way to begin recovering Idaho's dwindling populations of migratory fish.[56]

The Idaho Post-Register has written that "[w]hen the National Marine Fisheries Service decides this issue late in 1999, it will be faced with only one certain biologically sound option--breaching the dams."[57] The New York Times also recently endorsed breaching the lower Snake River dams.[58]

- Alaska Commercial Fishermen[59]

- Other Groups and Organizations[60]

---

55 Affiliated Tribes of Northwest Indians, *Resolution #97-28, "Endorsement of Natural River Restoration to Protect and Enhance Fish & Wildlife Populations in the Columbia River Basin,"* (Feb. 13, 1997).

56 "Let's make sure this sockeye isn't the last at Redfish Lake," Idaho Statesman (Boise, ID), Aug. 25, 1998.

57 Idaho Post-Register (Idaho Falls, ID), May 19, 1998.

58 *Saving the Snake River Salmon*, New York Times, Apr. 2, 2000.

59 *Alaska Commercial Fishermen Endorsing Removal of The Four Lower Snake River Dams* <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/esr/fishermn.htm>.

60 *See, e.g.*, News Release from Northwest Sportfishing Industry Association (Oct. 15, 1998) ("[A]fter years of declining salmon runs and the failure of fish barging and other expensive 'techno-fixes,' it is clear that restoring more natural river conditions is the only hope for our salmon an steelhead. . . . The

- Secretary of the Interior Bruce Babbitt

Although he has been predictably politically coy about specifically endorsing partial removal of the four lower Snake River dams, Secretary Babbitt has written:

> The next big test for river restoration is approaching on the lower Snake River and its four salmon killing dams. And it will be an epic debate, rivaling the great controversies of past years over Hetch Hetchy and Dinosaur National Monument. This time it will not be about protecting scenery within a National Park. It will be about restoring a river ecosystem and its salmon runs. That fact alone demonstrates how we as a nation have come to comprehend that our stewardship obligations extends beyond park borders to encompass entire watersheds and landscapes. . . . The national debate over the Snake River dams is underway. All parties, including the states and the Indian tribes, are turning to the scientists for an objective look at the alternatives. And the fisheries biologists are moving toward a consensus assessment--marginal mitigation projects are not enough. We probably cannot have salmon runs up into the Rocky Mountains and maintain four dams on the lower Snake River. We have reached the point where the arteries are so clogged that surgery to reduce the blockage may be the only hope, and it will finally be up to the people of the Northwest, their Governors and elected other representatives to decide.[61]

While Vice President Albert Gore has not taken a specific stand, he has called "the next 10 years 'the environment decade.' 'When it comes to our air, our water and the Earth itself, we all have a responsibility to look not just to ourselves, not just to the politics or profits of the moment, but to future generations,' he said."[62]

- The Public

---

best available science continues to re-affirm the need to restore more natural river habitat for salmon. Years of declining fish runs show that fish barging has not worked. . . . we need to reform the largest harvester of salmon and steelhead in the river, the federal dams . . .."); News release from Northwest Energy Coalition (Nov. 6, 1998) ("[S]cientific evidence makes it clear that the dams and reservoirs are the single greatest human cause" of salmon mortality. Scientific studies have "produced extremely persuasive evidence that partial removal of the four lower Snake River dams is essential to restoration of Snake River salmon and steelhead," and that "economic studies show that the region can retain low cost electricity after the partial removal. The Northwest Energy Coalition endorses the partial removal of the four lower Snake dams to restore salmon and steelhead."

61 Bruce Babbitt, Secretary, U.S. Department of the Interior, *A River Runs Against It: America's Evolving View of Dams*, Open Spaces, Fall 1998.

62 Matea Gold, *Thousands mark Earth Day; Gore outlines priorities for "environment decade,"* Seattle Times, Apr. 23, 2000 <http://www.seattletimes.com/news/nation-world/html98/eart23_2000 0423.html>. After nearly eight years in office and ESA listings for Northwest salmon of even longer duration, the CTUIR is still hopeful that such a attitude will begin to be demonstrated more forcefully.

Thousands of American citizens in the Northwest, and throughout the country, have voiced support for breaching the four lower Snake River dams. In a series of fifteen public hearings throughout the region on salmon recovery issues, the focus of debate was on dam breaching, and the majority of those expressing an opinion supported removal.[63]

---

63 *Hearings sentiment leans to breaching*, The Oregonian (Portland, OR), Mar. 23, 2000. *See also Breach Snake dams, most at hearing say*, The Spokesman-Review (Spokane, WA), Mar. 9, 2000 <http://www.spokane.net/news-story.asp?date=030900&ID=s753151>:

> Those in favor of dismantling four dams on the lower Snake River in Washington state outnumbered those defending the dams at a public hearing hosted by federal officials Tuesday. . . . Jerry Scheid, 63, who grows wheat and potatoes west of Idaho Falls, said the Endangered Species Act and tribal treaties make it clear that efforts must be made to save endangered salmon and steelhead runs. . . . "I think we've studied the question long enough," Scheid said. "If we don't breach the dams, we'll see increased demands for more and more water to increase streamflows, and I think that could be an immense threat." Jerry Myers, who lives in Salmon and is a river guide, said there are 30 to 40 businesses in that small mountain town, from air charter services to grocery stores to outfitters, that depend on remaining steelhead runs.

Crowd says Snake dams must go, The Spokesman-Review (Spokane, WA), Mar. 4, 2000 <http://www.spokane.net/news-story.asp?date=030400&ID=s751201>:

> A standing-room-only crowd almost unanimously agreed Thursday that the wild salmon of the Columbia and Snake river drainages must be saved from extinction, and the way to do it is to breach four dams on the lower Snake River. . . . An analysis by the Northwest Power Planning Council said breaching the earthen portions of the four dams and carefully using hatcheries to supplement fish would increase salmon populations by 125 percent. . . . Mike Larkin of Salmon, Idaho, drove three hours to reach the hearing because his town no longer has its namesake fishery, he told [federal representatives . . .. "You've killed our fish," Larkin said. "You've restricted our logging and our mining and our grazing, and now you've killed our fish. Breach the dams, and breach them soon." The salmon are the buffalo of Pacific Northwest Indian tribes, and an 1855 treaty requires that they be saved, tribal members said. "These salmon have been suffering for years and years," Thomas Joseph of the Nez Perce tribe told federal officials . . .. "We need to decide to take out those lower Snake River dams. We need to decide what is best for the fish," Joseph said. Again and again, the crowd of more than 200 repeated Joseph's call that Congress breach four dams between Lewiston, Idaho, and Pasco, Wash. . . . "The fish are getting ground up in these hydro-facilities," said Rick Stowell, a retired fisheries biologist and Trout Unlimited member. "If we don't take these dams out . . . these fish will go extinct."

Dan Hansen, *Spokane crowd favors removing Snake dams*, The Spokesman-Review (Spokane, WA), Feb. 9, 2000 < http://www.spokane.net/news-story.asp?date=020900&ID=s741776>:

> Four Snake River dams would be history if the decision were left to the people who had their say Tuesday in Spokane. By a large margin, speakers at a federal hearing said the government should breach the Eastern Washington dams and let the river run free in an effort to save salmon. . . . "A lot of my people are lost because of the loss of fish," said Gayla Gould, a member of the Nez Perce Tribe. "That's why there's so much alcoholism on the reservation." "You're messing

with my heritage when you mess with the salmon," said Paul Decker, who described himself as the sixth-generation descendent of Oregon Trail pioneers. . . . Mark Pinch, a commercial realtor and board member for the Spokane Area Economic Development Council[,] . . . said a free-flowing river and restored fish runs would be "a boon" to communities along the Snake and a lure for high-tech companies to come to Spokane. . . . The lopsided mix of dam-lovers and dam-haters was similar to the crowd that gathered for a hearing last week in Portland. . . . Tuesday's two-session hearing drew perhaps 500 people.

Feds urged to breach dams, The Spokesman-Review (Spokane, WA), Feb 4, 2000 < http://www.spokane.net/news-story.asp?date=020400&ID=s739947>:

Fishing guides, environmentalists, biologists and Indian tribes told federal authorities Thursday to take the bold step of breaching four dams on the lower Snake River because it represents the best chance for saving salmon runs. . . . Don Sampson, executive director of the Columbia River Inter-Tribal Fish Commission, warned that the tribes were ready to go to court to enforce treaties promising them the right to harvest Columbia Basin salmon in perpetuity if the federal government failed to reverse the decline. "The biological choice is clear. Breaching is required," Sampson said. . . . Speaking for Oregon Gov. John Kitzhaber, Joyce Cohen warned the federal government that it must start making progress on meeting standards of the clean water act in managing for salmon. Of the 51 people who testified during the afternoon session, 33 called for breaching the dams.

Breaching fever reaches coast: Commercial sector fears further fishing cuts, The Spokesman-Review (Spokane, WA), Jan. 31, 2000 <http://www.spokane.net/news-story.asp?date=013100&ID=s738299> :

[T]the idea of breaching Snake River dams is gaining popularity in coastal communities where salmon is -- or was -- king. . . . With a new round of hearings starting next week, some commercial fishing groups are urging their members to speak out. . . .[H]arvest cuts would hit particularly hard in Sitka and other southeast Alaskan communities, where one out of every 25 jobs is tied to trolling for salmon. Alaskan trollers -- who catch 70 percent of the chinook salmon landed in Alaska -- already have seen their summer fishing season reduced from 160 days in the late 1970s to 11 days in 1999. Alaska's total catch of chinook fell by half in the same period. . . . "The cutbacks that we've taken have cost me," said [Alaska fisherman Eric] Jordan, who learned to fish from his parents. "I'm 50 and I'm a super fisherman. I know how to catch them. But now I'm having to work at other jobs." . . . Given the magnitude of Alaska's concessions to salmon conservation, there's nothing outlandish about calling for dam removal, said Ralph Guthrie of Sitka. "To say it's radical is ridiculous," said Guthrie, a troller since 1941. "What is radical is to say you'll allow these fish to go away so you can grow a few potatoes." Some wonder whether the government is saying farm jobs are worth more than fishing jobs. U.S. Sen. Gordon Smith heard much the same message at a Jan. 19 town hall meeting in Astoria, Ore. Participants said the Pendleton Republican was grilled by fishermen and business leaders for his staunch support of the dams. Astoria once was home port to a fleet of more than 1,000 fishing boats, whose owners earned tidy livings. Now it supports about 700 boats, whose owners make most of their money fishing in Alaska or holding down other jobs. "Any kid who wanted to go to college when I was growing up could get a job in a cannery for the summer and make enough to pay for a year of college," said Steve Fick, 43, owner of an Astoria fish-processing plant. "Most of those jobs have been replaced by burger joints." Oregon's coastal communities have a higher than average suicide rate, state figures show. Fick attributes that partly to the

Removing dams is not new nor unprecedented.[64] It has happened around the country.[65] In some instances, news of such events seems to appear almost daily.[66] It has happened in the CTUIR's ceded territory, on the nearby Walla Walla River. It has helped fish.[67]

---

decline of salmon. "And then you get some . . . senator who tells you, 'I don't know what the solution is, but I'm sure it's not the dams,'" he said, noting that most scientists who study the issue say otherwise. . . . Bruce Buckmaster, president of the commercial fishing group Salmon for All and one of the participants at Smith's meeting, doubted the crowd included more than a few environmentalists. Mostly, he said it was business people and fishermen. "Commercial fishermen usually don't wear Birkenstocks," said Buckmaster. "They tend to leak." Groups like Salmon for All and the Alaska Trollers Association have joined with the Sierra Club, Idaho Rivers United, Trout Unlimited and similar groups in a Seattle-based coalition called Save Our Wild Salmon. The coalition's goal is the removal of Lower Granite, Little Goose, Lower Monumental and Ice Harbor dams.

64 Patrick Joseph, *The Battle of the Dams*, Smithsonian, Nov. 1998, at 48.

65 *See, e.g., Busting dams*, The Spokesman-Review (Spokane, WA), Mar. 12, 2000 <http://www.spokane.net/news-story.asp?date=031200&ID=s753269> (discussing report by American Rivers and Trout Unlimited, "Dam Removal Success Stories: Restoring Rivers Through Selective Removal of Dams That Don't Make Sense," that documents the removal of 465 dams in the United States and details 25 successful case studies); John Hughes, *Fish, water activists praise dam removal: Study says removal of 465 dams boosts economies, fish habitat*, The Spokesman-Review (Spokane, WA), Dec. 14, 1999 <http://www.spokane.net/news-story.asp?date=121499&ID=s719144>:

From the Kennebec River in Maine to Whitestone Creek in Washington state, the removal of 465 dams has boosted local economies and fish habitat while reducing public safety risks, three environmental groups said Monday. A study of all U.S. dam removals since 1912 shows removals are an accepted means of dealing with unsafe, unwanted and obsolete dams, say American Rivers, Friends of the Earth and Trout Unlimited . . .. More than 2 million dams are still standing nationwide, including 75,000 dams 6 feet tall or higher, the groups say. . . . [T]here have been success stories in dam removals . . .. The 24-foot-high Edwards Dam in Maine was built in 1837 to help navigators and power saw mills. But barging on the Kennebec River was abandoned by the mid-1800s and the sawmills later closed. Removal of the dam last summer has created new opportunities for tourism, boating and fishing, the report said. In northeastern Washington state, the 32-foot-high Rat Lake Dam was built in 1910 to help store water but was removed in 1989 because of safety deficiencies. An inadequate spillway could have led to rapid dam failure, and removal eliminated several safety hazards, the groups said. Most dams have been removed to address environmental concerns, such as restoring fish runs; to resolve public-safety concerns; and to deal with economic issues, such as their becoming too expensive to maintain, the report found. States with the most recorded removals were Wisconsin, 73; California, 47; Ohio, 39; and Pennsylvania, 38, the groups said.

66 *See, e.g.*, Steven Ginsberg, *Freeing Fish on the Rappahannock*, Washington Post, Apr. 22, 2000, at B3 < http://www.washingtonpost.com/wp-dyn/articles/A60458->:

[O]fficials declared that the 91-year-old Embrey Dam, which replaced a version built in 1855, would be destroyed by 2002, one of thousands of dams across the country targeted for

We must begin the process of partially removing the four lower Snake River dams at once, realizing it may be decades before the full benefits are seen. Dam breaching may not occur for several years, but its results may still be more immediate than those from no-less-necessary tributary habitat improvements. The federal government should proceed now with both strong measures in the other three Hs, and the engineering and mitigation tasks associated with breaching.[68] The risks of delay are substantial.

VII. Risks of Delay

13, 14

Since Snake River basin spring and summer chinook are at high demographic risk of localized extinction, The CTUIR is concerned that delays in implementing recovery actions may prevent recovery and in some cases contribute to extinction. Further delay impermissibly perpetuates the already long period during which the tribes have been deprived of the ability to fully exercise our right to take fish. Further delay significantly increases the risks of extinction for endangered Snake River salmon, according to the National Marine Fisheries Service. There is little time to

---

destruction. "We're going to bring her down," [Virginia Senator John] Warner promised the enthusiastic crowd of about 50. "If for any reason the project is not completed . . . I'm going to get my Marine buddies and we're going to blow it up. We are simply trustees that God put us into the position to preserve this great nation for future generations. That's what we're doing." [Dams are being removed in part] to ensure that natural fish populations don't die out. . . . Moreover, the Embrey Dam and others across the country are slated for destruction because they no longer serve many of the purposes for which they were built. . . . The Embrey was part of a dam building spree in the United States that lasted from the latter half of the 19th century until the mid-1970s. In all, more than 75,000 dams--or nearly one every day since the signing of the Declaration of Independence--were erected to corral potentially dangerous waterways and satisfy local water and power needs. During the last few years, though, as dams have become increasingly obsolete, a nationwide movement has begun to either knock them down or forge a way around them. Officials estimate that nearly 500 dams have been removed, breached or otherwise negotiated in the last decade, including 26 in the District, Maryland and Virginia. . . . The Embrey Dam, for instance, prevents fish from making it to their natural spawning habitats further up the Rappahannock from the Chesapeake Bay. Locally, efforts to free fish have picked up in recent years. In addition to progress on the Embrey Dam, construction began in October on a new passageway to allow fish to traverse the Little Falls Dam on the Potomac River. Also, a number of area groups have mobilized to de-dam Rock Creek, which is blocked in more than a dozen spots by small obstacles that prevent fish from traveling up from the Potomac. So far three dams on the waterway have been breached or removed.

67 *See, e..g, Busting dams*, The Spokesman-Review (Spokane, WA), Mar. 12, 2000 <http://www.spokane.net/news-story.asp?date=031200&ID=s753269 ("Fourteen spring-run Chinooks were counted at California's Butte Creek in 1997. After four small dams and 12 unscreened water diversions were removed in 1998, 20,000 of the endangered salmon were observed making a spawning migration.")

68 Should we see significant progress toward tribal restoration goals, then, *and only then*, should any consideration be given to possibly deferring a decision on breaching.

lose. Quick and dramatic improvement in survival rates is needed. We also need to greatly improve tributary habitat management and practices, although this alone cannot save the fish.

13, 14 cont.

Some have resorted to vague talk of other steps to recover salmon, such as floating net pens, "new and improved" barging,[69] so-called "fish-friendly" turbines, "fish pumping," and even digging a new, artificial channel for fish, in lieu of breaching. Unlike some whose minds are closed, we are open to all alternatives, including non-breaching. We do not oppose any legitimate, scientifically valid salmon recovery options. We believe that they should be explored. They should not be used only to delay and divert attention away from the dams, however.

VIII. Non-Breaching Alternatives - and Excuses

15, 16

There are three specific non-breaching alternatives--Alternatives 1, 2 and 3--in the Draft FR/EIS. None of the three will recover and restore salmon consistent with the mandates of the federal Endangered Species Act. They will not honor the Treaty of 1855 nor fulfill the federal government's Trust Responsibility to the CTUIR and the other Columbia River Treaty Tribes. Alternatives 1, 2 and 3 require the tribes to sacrifice their treaty-reserved rights so that others can continue to enjoy subsidized water-borne transportation of commodities and continued access to some of the cheapest hydroelectric power in the nation.[70] It is unjust and illegal for the federal government to elevate a relatively small proportion of economic interests over the solemn rights of the Treaty Tribes and over the continued existence of salmon.

---

69 *But see* Letter from Stephen Mealey, Director, Idaho Fish and Game Department, to Donald Chapman, Ph.D. (Oct. 31, 1997) ("Smolt transportation has been the vanguard of the federal and industry view of salmon recovery since populations crashed in the late 1960s and 1970s. During this period, wild Snake River spring/summer chinook and summer steelhead declined by approximately 85%. . . . In view of this track record, the Idaho Department of Fish and Game . . . finds no basis in the data and adaptive management principles for supporting smolt transportation as a primary long-term recovery tool."). *See also* NW Fishletter, Apr. 7, 1998 ("[T]he ISAB report [on the Corps' fish transportation program] points out that current return rates, even with transported fish, are still below the two percent to six percent scientists feel is necessary for recovery of the listed stocks." Rick Williams, chairman of the Independent Scientific Advisory Board (ISAB), said that "[t]ransportation will continue to lead to extinction because of low SARs [smolt-to-adult returns].").

70 Government subsidies do not always go to the deserving. *See, e.g.*, East Oregonian (Pendleton, OR), Sept. 12, 1995, at 2A ("[T]he bulk of government [farm] payments goes to a minority of farmers. . . . [Two] percent of farm payment recipients got 27 percent of the of the total subsidies paid from 1985 through 1994. . . . [Sixty thousand] corporations, partnerships and individual farmers collected $29.2 billion of the nearly $109 billion paid out during the decade, according to [a study by the Environmental Working Group, based on USDA records], which was released Monday [September 11, 1995]. . . . The Agriculture Department reported last December that the top 17 percent of farms, measured in gross sales, received two-thirds of farm payments in 1993. Congress' General Accounting Office reported in March that 54 percent of all 1993 deficiency payments went to about 10 percent of the 989,000 farms receiving benefits.").")

15, 16 cont.

Compliance with the ESA does not equal compliance with treaty and trust obligations. They are separate laws with different objectives. The CTUIR clearly reserved more than the remnant salmon runs sufficient to meet ESA de-listing criteria.[71] The federal government should specifically identify the laws and policies with which it must comply. The federal government's failure to be clear about what it must do, by when, is a significant contributing factor to the failure of the 1995 Biological Opinion on the FCRPS. Instead of fully recognizing the magnitude of the improvements in salmon survival that were, and are, necessary, the goal of the Opinion was perceived as "increasing salmon survival."[72] This failure to have clear objectives likely contributed to the federal government's failure to secure additional flow augmentation (as promised in the Opinion) and its tendency to exploit the vagueness of the Opinion to cut corners for the benefit of power generation and to the detriment of fish. Five years after the adoption of that Opinion, flow targets remain largely unmet, and spill is less than called for due to dissolved gas and power transmission constraints.

Neither Alternative 1, 2 or 3 will lead to compliance with the federal Clean Water Act. Like its treaty and trust obligations to Indian tribes that are distinct from its ESA responsibilities, the Clean Water Act (CWA) imposes separate duties on the Corps and other operating agencies. The ESA does not supersede or re-define the obligations of other laws: "the Endangered Species Act and the Clean Water Act are distinct statutory schemes. Compliance with one statute does not equal compliance with the other."[73]

17

The Corps' operation of the lower Snake River dams must comply with Washington's water quality standards. Therefore, if the dams are to remain in place, they must be modified to comply with state water quality standards for temperature and dissolved gas. Managing the dams, either through operational decisions or by failing to implement structural modifications, so that they fail to meet water quality standards is not an option. Alternatives 1, 2 and 3 must contain provisions to ensure compliance with, among other things, the total dissolved gas standard during involuntary spill. There is no evidence indicating that salmon and resident species are not affected by elevated total dissolved gas from involuntary spill.[74]

In fact, the highest dissolved gas levels generally occur during periods of involuntary spill. The DEIS concedes that alternatives 1, 2 and 3 will significantly violate Washington's total dissolved

---

71 The Draft FR/EIS does not include Treaty Rights as one of the federal laws with which it must comply. *See* Draft FR/EIS at 1-20.

72 Draft FR/EIS at 5.4-1.

73 National Wildlife Federation v. Corps of Engineers, Civ. No. 99-442-FR (Mar. 21, 2000) at 16, *citing* Seattle Audubon Society v. Evans, 952 F.2d 297, 302 (9th Cir. 1991).

74 The term "involuntary spill" is somewhat inaccurate. It includes spill stemming from flows in excess of powerhouse capacity and the more controllable spill that occurs when BPA has failed to find a market for all the power it can generate.

gas standard during periods of high run-off,[75] yet fails to propose reasonable mitigation measures (such as raised stilling basins) that would lead to compliance under all operating conditions. The Corps' failure to design these alternatives so that they comply with state water quality standards biases the economic analysis by making the non-breaching alternatives less expensive than they actually are.

17 cont.

The CTUIR is concerned that the Draft FR/EIS has so far not adequately addressed water quality issues.[76] The Corps must look at structural and operational measures and modifications to the dams for the non-breaching alternatives in order to begin to bring them into compliance with the Clean Water Act. Specifically, the Corps must examine engineering feasibility and design and projected costs (cost assessment) of such measures and modifications. Specific measures involve, but are not limited to, dissolved gas abatement (to comply with the 110% dissolved gas standard) and temperature control, such as pumping cooler water into the fishways (to comply with the 68° F standard). The Capital Construction Work Group (including Corps and CRITFC staffs) compiled a list of structural measures and their projected costs for Dworshak Dam and the four Lower Snake River dams to meet gas and temperature standards. The Corps should include these measures and costs in its analysis.

18

Water is the lifeblood of the Pacific Northwest. It is the lifeblood of all the resources upon which our religion, culture and economy are based. It is, like salmon, sturgeon and eels, an integral part of our existence as Indian people, here in the Columbia River Basin (and throughout North America).[77] When we ceded 6.4 million acres of land to the United States, we never gave away the water needed to support our religious, cultural and economic life. Our ancestors explicitly reserved the right to fish, hunt and gather plants roots and berries in all our usual and accustomed areas. Thus, they implicitly retained the water necessary to sustain these resources off-reservation, throughout our usual and accustomed areas.[78]

---

75 *See e.g.*, Draft FR/EIS at 5.4-17; 5.4-25; *c.f.*, Draft FR/EIS at 5.4-32 (Surface bypass collectors could ameliorate the need for *voluntary* spill thereby reducing associated dissolved gas levels).

76 *See Salmon recovery plan will require changes in water usage*, Seattle Times, Jan. 19, 1999 (quoting Washington Governor Gary Locke, stating that "[j]ust as people need clean water, salmon need clean, cold water.").

77 *See, e.g.*, American Indian Resources Institute, *Perspective on Indian Policy, History and Law: Selected Readings* (1983), quoting Frank Tenorio, a leader of the San Felipe Pueblo: "There has been a lot said about the sacredness of our land which is our body; and the values of our culture which is our soul; but water is the blood of our tribes, and if its life-giving flow is stopped, or it is polluted, all else will die and the many thousands of years of our communal existence will come to an end." (quoted in Getches and Wilkinson, *Cases and Materials on Federal Indian Law* 20 (2nd ed. 1986).

78 Winters v. United States, 207 U.S. 564 (1908) is a landmark case recognizing the implicit reservation of water rights by tribes in their treaties. One of the several reasons the U.S. Supreme Court cited for its decision is a canon of construction that states that "[b]y a rule of interpretation of agreements and treaties with the Indians, ambiguities occurring will be resolved from the standpoint of the Indians." Our ancestors

18 cont.

Federal courts have consistently recognized this reservation of instream water rights to ensure our treaty fishing right.[79] This reserved instream water right has a priority date of "time immemorial." Under the prior appropriation doctrine, this water right is superior to any and all other water rights in the Columbia and Snake River Basins.

At this time, the CTUIR have not made a claim to minimum instream flows in the Columbia and Snake Rivers based on our time immemorial priority date treaty water right. Even when an instream water right has not been formally adjudicated, however, the federal government must honor a tribe's superior priority date to prevent impacts to treaty-protected fisheries.

19

Alternatives 1, 2 and 3 rely to varying degrees on the continuation, or even "enhancement," of artificial transportation of migrating juveniles--barging and trucking. This is a failed policy.[80] Many have pointed out the proven futility of inordinately emphasizing excessively technological approaches to salmon recovery.[81] The Alaska Department of Fish and Game has provided detailed criticisms:

> ADF&G believes that the effects of these three alternatives on Snake River salmon would be very similar because there is limited room for increasing the numbers of fish transported. The Corps already transports most Snake River fall chinook and 60-75 percent of spring/summer chinook. Increased transportation options would enable the

---

did not anticipate at the time of the Treaty of 1855 that massive dams would be built throughout the region, disrupting the lifegiving flows of water so vital to our fish, wildlife and plants.

79 United States v. Adair, 478 F. Supp. 336 (D. Or. 1979), *aff'd* 723 F.2d 1394 (9th Cir. 1984); *cert. denied sub nom.*, Oregon v. United States, 467 U.S. 1252 (1984); Colville Confederated Tribes v. Walton, 460 F. Supp. 1320 (E.D. Wash. 1978), *aff'd*, 647 F.2d 42 (9th Cir. 1980), *cert. denied*, 454 U.S. 1092 (1981); *enforced*, Colville Confederated Tribes v. Walton, 752 F.2d 397 (9th Cir. 1985); United States v. Anderson, 736 F.2d 1358 (9th Cir. 1984); Kittitas Reclamation District v. Sunnyside Valley Irrigation District, 763 F.2d 1032 (1985); Muckleshoot Indian Tribe v. Trans-Canada Enterprises, Ltd., 713 F.2d 455 (9th Cir. 1983), *cert. denied*, 465 U.S. 1049 (1984); Joint Board of Control of the Flathead, Mission and Jocko Irrigation District v. United States, 832 F.2d 1127 (9th Cir 1987); Washington Dept. of Ecology v. Yakima Res. Irr. Dist., 850 P.2d 1306 (Wash. 1993).

80 Letter from Stephen Mealey, Director, Idaho Fish and Game Department, to Donald Chapman, Ph.D. (Oct. 31, 1997) ("Smolt transportation has been the vanguard of the federal and industry view of salmon recovery since populations crashed in the late 1960s and 1970s. During this period, wild Snake River spring/summer chinook and summer steelhead declined by approximately 85%. . . . In view of this track record, the Idaho Department of Fish and Game . . . finds no basis in the data and adaptive management principles for supporting smolt transportation as a primary long-term recovery tool.")

81 *See, e.g.*, Energy and Water Subcommittee Report, FY99, June, 1998 ("The [House Appropriations] Committee has previously expressed its deep concerns regarding the vast sums of taxpayer dollars poring into this project with little apparent effect. For all its reliance on technological fixes and fish barging, there is no clear evidence that the salmon recovery efforts in the Pacific Northwest are, or will become, successful.")

19 cont.

> Corps to transport only about 10-20 percent more spring/summer chinook. Moreover, as the Draft FR/EIS recognizes, increasing transportation would increase both the benefits (decreased in-river mortality from predation and dam passage) and *deficits* (increased stress, increased straying, delayed mortality) of transportation. Continuing the current transportation program would leave Snake River spring/summer at risk of extinction within the next 10 years. And if delayed mortality is in fact high, increasing the number of juvenile salmon transported would only increase salmon mortality. Intensive transport efforts will require handling a high proportion of downstream migrants. The increased removal of juvenile fall and spring/summer chinook salmon into rapid downriver transport and involuntary release into the estuary could result in an increase in delayed mortality. Alternatives 1, 2, and 3 fail to recognize that while increasing fish transportation and bypass systems during the 1980s clearly increased direct survival from Lower Granite dam to below Bonneville, the smolt-to-adult ratios (SAR) for spring/summer chinook has not increased. The fish populations of the Snake River are not rebounding. The status quo of managing the problems caused by the dams is not maintaining the runs, much less recovering them. After 20 years of transporting, salmon runs are still in decline and transport-related mortality is still uncertain. ADF&G believes that these alternatives tend to loose sight of the fact that transportation has not solved the problem for these ESA listed fish and may in fact be part of the problem. Furthermore, these three alternatives do nothing to ameliorate the known adverse conditions for Snake River salmonids. Instead they focus on indefinite truck and barge transportation systems. To improve conditions for Snake River salmon several adverse conditions must be addressed: water temperatures, which are at times above lethal limits for both juvenile and returning adult chinook, must be reduced; increased predation due to slowed migration and an increase in reservoir-based predators must be reversed; a sufficient quantity of additional spawning habitat for fall chinook and quality migrating and rearing habitat must be provided.[82]

Alternatives 1, 2 and 3 will perpetuate the adverse genetic impacts of the FCRPS on anadromous fish. The Draft FR/EIS does not acknowledge the likely repercussions on the genetic structure of salmon stemming from the operation of the FCRPS. There are many ways that the FCRPS could affect the salmon "selection" process such that it would alter the genetic structure against certain salmon life history stages. These include the impacts of extended-length bar screens against subyearling migrants. In addition, extended-length screens also affect sockeye, which are prone to de-scaling,[83] and lamprey. The CTUIR has repeatedly stated our concern with impacts to salmon and lamprey from extended length screens.

---

82 Office of the Commissioner, Alaska Department of Fish and Game, *Comments on the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement*, Mar. 30, 2000 <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/esr/deiscom.htm> (emphasis in original).

83 Lamprey may also suffer significant impacts from impingement on extended length screens.

19 cont.

Transportation timing is often keyed to when there are seemingly "worthwhile" numbers of fish to transport. This "efficiency" penalizes those fish whose run timing occurs in the tails of the bell curve (most likely wild fish). The Draft FR/DEIS recognizes that fish reaching the estuary at certain times seem to survive better than fish arriving at other times. Given the pervasive influence that the FCRPS exerts on run-timing for both juveniles and adults, it is clear that the FCRPS has affected and continues to affect anadromous fish genetic structure.

The DEIS notes that crowding of fish into barges and raceways may facilitate disease transmission, thereby affecting survival and potentially being a significant factor in differential delayed mortality. This has genetic implications, as well. This crowding of fish originating from distant watersheds into close quarters facilitates contact and disease transmission that would not occur, but for the FCRPS. There are myriad ways in which the FCRPS exercises selective pressure on salmonids and none of them appear to have been adequately discussed or considered in the Draft FR/EIS.

20

Other examples of FCRPS influence on salmon genetic structure likely include the use of spill as a tool for passing fish. Spill is significantly constrained by BPA's desire to maintain its position as a cheap electricity supplier[84] Accordingly, there is much greater reliance on barging and trucking as a means of bypassing subyearling migrants around the dams so that spill will not be implemented when power prices are higher.

Some have asserted that dams are not even the real problem. They point to ocean conditions or terns, or harvest. It has been said that "[t]he role of ocean conditions continues to be largely ignored by NMFS, despite the fact that the ocean is where salmon spend most of their lives and where there is the highest mortality."[85] Yet the ocean has always been a source of high mortality. The ocean has always been with us, and so too were the salmon, until the last few decades. These decades saw the corresponding construction of the lower Snake River dams, and the decline of Snake River salmon. Since the dams were built, returns have decreased more than those in rivers with fewer dams. The difference is that Snake River salmon have to pass eight dams, which is four dams too many. If the problem is in the ocean, then Snake River salmon are more sensitive to those conditions, which is unlikely.[86] Undue focus on ocean conditions, when

---

84 The Draft FR/EIS notes that "[t]he majority of spill occurs at night." Draft FR/EIS at 3-20. This is because that is when power demand is the lowest. Thus the federal government's response to power demand results in limiting the availability of a relatively safe means of passage to juvenile fish that migrate during the day. The transmission system also affects the availability of spill. The transmission system provides access to markets, such as California, with significant summer demand and high power generation costs relative to BPA's. It is difficult for juvenile summer migrant salmon to compete.

85 Barry Espenson, *Smith's Hearing Hashes Over Recovery Arguments*, Columbia Basin Bull., (Apr. 21, 2000) (quoting U.S. Senator Gordon Smith, R-OR).

86 N.S. Nokkentved, *Scientists tackle salmon science*, Twin Falls, ID, Times-News, Apr. 21, 2000 (citing comments by Charlie Petrosky, Idaho Department of Fish and Game).

there may be little if anything that can be done to ameliorate them, does not serve well the interests of salmon recovery.[87]

Terns, too, have often been mentioned. Undeniably, they are a problem, one of many that needs to be corrected. The tribes support efforts to relocate the terns. We will continue to work on the Avian Predation Task Force, as we have done for years. Nevertheless, we should note that the tern situation is largely the result of the hydrosystem itself.[88]

21 Harvest, of course, continues to be a favorite target. Tribal harvest, in particular, is still the subject of scorn and hostility.[89] Nevertheless, the past twenty years have proven that Snake River spring/summer chinook cannot be rebuilt via severe harvest restrictions. Even NMFS

---

87 *See* Letter from Stephen Mealey, Director, Idaho Fish and Game Department, to Donald Chapman, Ph.D. (Oct. 31, 1997) ("[The] perspective [that poor ocean condition is the primary reason for salmon declines] has been relegated to the fringe of scientific thought by the PATH scientists. . . . [D]ownturns in ocean conditions amplify, not diminish, the need for aggressive actions on manageable fronts.")

88 Roby, *et al.*, *Avian Predation on Juvenile Salmonids in the Lower Columbia River* (1997). There is "a growing body of evidence that the operation of the hydrosystem may be contributing to unexpectedly high avian predation rates on juvenile salmonids in the Columbia River estuary." There are data indicating "that various efforts to reduce smolt mortality in-river (e.g., . . . barging) may cause hatchery-raised smolts to reach the estuary before they are physiologically capable of smoltification. Smolts that reach the estuary prematurely may be avoiding seawater by remaining in the freshwater lens at the surface where they are more vulnerable to tern predation. Also the additive stress on juvenile salmonids from negotiating dams and/or being barged down river may contribute to reduced physiological condition and enhanced disease, factors that will tend to further increase the vulnerability of smolts to bird predation in the estuary. . . . Hydroelectric dams create 'bottlenecks' to salmon migration and often injure or disorient out-migrating juvenile salmonids, increasing their vulnerability to predators. . . . [J]uvenile transportation practices that release salmonids *en masse* offer avian predators additional opportunities to exploit concentrated and vulnerable prey." *See also Northwest Salmon Recovery Report*, Jan. 18, 1999, at 9 ("[T]he fundamental reason that the Columbia River salmonids experience a 'fragile status' is a series of enormous dams that have been built on the Columbia River, and the failure of natural resource agencies to mitigate effectively the damages to migratory fishes that those structures cause. We believe that it is both unscientific and contrary to law to destroy or jeopardize healthy seabird colonies because state and federal fishery managers have not devoted the resources necessary to enable the salmonid populations to reproduce successfully in an alien environment that has destroyed their natural breeding strategies. Moreover, we believe that operational changes at the dams would yield far more benefits to . . . salmon and steelhead than harassing seabirds or destroying their colonies. . . . The options supported by some agencies are based upon misguided belief that Caspian terns are somehow culprits in the demise of certain populations of salmonids. This is tantamount to coming home after an unsuccessful day at work and kicking the family dog.") (*quoting* Letter from Craig Harrison, Vice-Chair for Conservation, Pacific Seabird Group, to Oregon Department of Fish and Wildlife).

89 In Pasco, Washington, two months ago, tribal elders were confronted with signs reading, "Save Our Salmon, Eat Indian Gillnetters." Confederated Umatilla Journal, Mar. 2, 2000, at 4 (photo).

admits that zero harvest would have little effect on salmon survival. Populations will continue to decline unless other mortality factors are reduced.[90]

The tribes have severely restricted harvest for years. We stopped commercial fishing for summer chinook in 1964. We haven't had a commercial spring chinook season since 1977. We stopped voluntarily, to conserve the resource when runs were low. Our remaining fall chinook commercial season has lasted, at most, a week or two. Our tribal longhouses have not had enough fish for traditional ceremonies and religious practices. We have been limited to harvest rates in the single digits. We have tried to do our part. Yet we wonder why the dams are allowed to harvest 40 percent of some adult runs, and up to 99 percent of some migrating juveniles.

21 cont.

We view all human-caused mortality as "harvest," yet we see the federal government treat non-fisheries caused mortality very differently than fisheries. The dams are allowed to kill vast numbers of listed salmon far greater than put to good use in tribal fisheries. Now, it appears that NMFS is preparing to issue a biological opinion for the federal hydrosystem that will push the recovery burden from hydropower to the tribes, again denying us any long-term certainty for meaningful fisheries. It is time for the United States to restrict its own harvest--from hydropower generation, land management practices, and water development projects--before it further restricts tribal treaty fisheries.

In their interpretation of tribal treaties, federal courts have established a large body of case law setting forth certain fundamental principles. These principles, also known as the "conservation standards," set the standards for state and federal regulation of Treaty Rights.[91] For state or federal regulation of treaty fishing rights to be permissible, it must be demonstrated that the regulation is "a reasonable and necessary conservation measure . . . and that its application to the Indians is necessary in the interests of conservation."[92] Government regulation must not

---

90National Marine Fisheries Service, *Biological Opinion: Impacts of Treaty Indian and Non-Indian Year 2000 Winter, Spring, and Summer Season Fisheries in the Columbia River Basin, on Salmon and Steelhead Listed Under the Endangered Species Act* 57 (Feb. 29, 2000) ("Even with zero harvest the analysis indicates that all of the index populations will continue to decline unless conditions affecting survival in other sectors are improved . . .. Elimination of harvest can not change that general result. Growth rates decline with increasing harvest, but the effect on the growth rate is relatively small - on the order of one or two percentage points.").

91 The conservation standards should be familiar to the federal government. They are summarized in the tribes' salmon restoration plan *Wy-Kan-Ush-Mi Wa-Kish-Wit* (Spirit of the Salmon) at 4-2. The conservation standards were largely adopted by the Secretaries of the Interior and Commerce in Secretarial Order 3206 (June 5, 1997).

92 Antoine v. Washington, 420 U.S. 194, 207 (1975); *see also* Puyallup Tribe v. Dept. of Game, 414 U.S. 44, 49 (1973).

21 cont. discriminate against Indians exercising treaty rights, either on its face or as applied.[93] And, all measures must be taken to restrict non-Indian activities before treaty rights may be regulated.[94]

22, 23 Alternatives 1, 2 and 3 violate the conservation standards. They do not equitably allocate the conservation burden. They discriminate against the tribes' exercise of our Treaty-reserved Rights to take fish. The Draft FR/EIS makes clear that in order to meet ESA requirements for listed fall chinook and steelhead, either the dams must be breached or the tribes' harvest of fall chinook and steelhead must be even more heavily restricted.[95] Alternatives 1, 2 and 3 all call for keeping the dams in place and continuing the failed policies of barging and trucking juvenile salmon around the dams. Alternatives 1, 2 and 3 also discriminate against the tribes with respect to spring/summer chinook because spring/summer chinook will continue their decline to extinction even if treaty fisheries are completely eliminated. The federal government has so mismanaged these fish that even taking away the tribes' ceremonial and subsistence fisheries is not enough to compensate for mortality stemming from poor non-Indian land and water management practices.[96]

The costs of operating the hydrosystem must be internalized and not shifted to the tribes or the region's salmon resources. From our perspective, the environmental baseline for our fisheries and the standards for resource protection and restoration were set under the Treaty of 1855.

In addition to directing attention away from the hydrosystem, many dam breaching opponents raise the specter of flooding, of unleashing tons of sediment, of lost power and navigation.[97] At its most basic level, we do not understand how *lowering* the river level will ***increase*** the chance of flooding downstream. Even the Corps has said the lower Snake River are not authorized for flood control.[98]

---

93 *See* Puyallup Tribe v. Dept. of Game, 414 U.S. 44, 49 (1973); Lac Courte Oreilles Band of Indians v. Wisconsin, 668 F. Supp. 1233, 1237 (W.D. Wis. 1987).

94 *See e.g.*, United States v. Washington, 520 F.2d 676, 686 (9th Cir. 1975), *cert. denied*, 423 U.S. 1086 (1976); Lac Courte Oreilles Band of Indians v. Wisconsin, 668 F. Supp. 1233, 1235-36 (W.D. Wis. 1987).

95 These alternatives will not result in rebuilding salmon so that the tribes will be able to fully exercise their Treaty Rights. These alternatives fail to meet applicable legal requirements because they fail to comply with the tribes' rights to take fish.

96 NMFS, Biological Opinion, Impacts of Treaty Indian and Non-Indian Year 2000 Winter, Spring, and Summer Season Fisheries in the Columbia River Basin, on Salmon and Steelhead Listed Under the ESA (Feb. 29, 2000) at 57.

97 The cries of alarm can sometimes reach near-hysterical proportions. *See, e.g., Drawdowns pose threat to human existence*, Hermiston Herald (Hermiston, OR) Jan. 24, 1995 (editorial).

98 *See* Lewiston Tribune (Lewiston, ID), Aug. 16, 1998 ("The four dams between Lewiston and Pasco, that are being considered for breaching -- Lower Granite, Little Goose, Lower Monumental and Ice

Concerns over sediment have also been expressed. The tribes believe that some concern is justified. However, most of the sediments will have been removed or stabilized in two years, depending on flows.[99] They may be disbursed even faster near individual dams. Ecological benefits may be seen in two to four years. In-river passage for both juveniles and adults would be improved quickly by removing the obstacles posed by the dams.

24 Nevertheless, we wonder why we are hearing about the sediment issue now. We wonder why we have not heard about it before, since the lower Snake River has been routinely dredged for years to maintain shipping. Much of those dredge spoils and sediments have been re-deposited in the river. Yet there has been nothing but silence on the subject. There are plans to continue maintenance dredging in the lower Snake over the long term. So far, we have heard no concerns over the disturbed sediments it may generate. Similarly, we also wonder why there is not the same concern over plans to dredge the lower Columbia River estuary to increase shipping, disturbing sediments there. This is the estuary that even NMFS has said is vital to the health and productivity of the salmon.

Breaching *would* eliminate power production from the lower Snake River dams. They produce only four to five percent of the region's electricity, however. Average electric rates could increase from $1 to $5 per month.[100] Newer analysis suggests even lower costs, from $1 to $3 per month.[101] Affordable replacement power may be available through a combination of cost-

---

Harbor -- are run-of-the-river dams. 'A run-of-the-river dam has some significant application in water management, but they are not necessarily true flood control dams. That's what storage reservoirs are for,' says Dutch Meier, spokesman for the corps at Walla Walla. 'Run-of-the-river dams must pass virtually all the water that arrives.'").

99 In certain locations of the Lower Granite section of the Snake, the forebays directly in front of the dams, may take longer, up to 10 years to have sediment removed, but this is all based on the historical runoff values. No mention is made in the Draft FR/EIS of augmenting natural flows through manipulation of upstream reservoirs to increase flows and increase the rate of sediment removal. We feel this calculation is worth exploring.

100 *See, e.g.*, *New look at costs of breaching dams*, Seattle *Post-Intelligencer*, Jan. 15, 1999 ("Breaching four Snake River dams to help salmon would probably not boost household electric bills by much in the Puget Sound region, an initial federal estimate suggests. . . . [I]t would probably increase the monthly electric bill of an average Seattle household by less than $1 per month, federal officials said . . .. The added monthly cost would likely be even less for residential customers of Tacoma City Light and Puget Sound Energy, since they rely even less than Seattle City Light on federal power. The expected rate increase 'is not going to mean much' to most residential customers, said Ed Mosey, a spokesman for Bonneville Power Administration. . . . [T]he rate forecasts are the best federal estimates so far on how dam breaching would affect ratepayers. . . . [S]pread[ing] the cost of breaching across all Northwest electricity consumers - regardless of the source of their power - could boost monthly household bills by an average of about $2, or 4 percent, BPA officials said.").

101 The Corps figures assume status quo hydrosystem operations, whereas the revised numbers assume some additional flows and spills for salmon which will almost certainly be required if the dams stay in

effective energy conservation and investments in wind, solar and other clean, renewable power sources.[102] The potential for conservation is substantial, and should not be discounted.[103]

Commercial navigation to Lewiston would end, but it would continue to and from the Tri-Cities. Economic development opportunities for the Tri-Cities area would potentially increase. Lewiston could remain a commercial transportation hub, with proper investment in highways and rail. Recreational opportunities could be enhanced significantly.[104]

25

Ultimately, none of the non-breaching alternatives will lead to the 2 percent to 6 percent Smolt-to-Adult Return ratios (SARs) needed to recover the runs. Any information conveying the impression that survival through the dams has improved dramatically is irrelevant, since it does not change the fact that SARs are too low. Alternatives 1, 2 and 3 do not address the issue of delayed mortality. There is a growing body of evidence, not to mention logic, that transported fish suffer from delayed mortality even more than in-river migrants. If there is an obligation to act, and there is, then it makes sense to take the most logical action, and that is dam breaching. Moreover, it is hardly more expensive than complying with the Clean Water Act and other applicable laws by spending more on existing infrastructure.

---

place, and those flows and spills will cost some hydropower generation. The average residential customer of a utility which receives all its power from BPA may incur an additional $1 to $3 per month; for most customers of BPA, whose utilities receive only a portion of their power from BPA, the actual increase will be less.

102 David Marcus and Karen Garrison, *Going With The Flow: Replacing Energy From Four Snake River Dams* (Apr. 10, 2000) <http://www.nwenergy.org/publications/docs/sum_cl_energy.html> (Executive Summary). *See also* Mike Lee, *Report urges power conservation efforts*, Tri-City Herald (Kennewick, Pasco, Richland, WA), Apr. 10, 2000 <http://www.tri-cityherald.com/news/2000/0410.html#anchor 596187>.; *Dam study finds new energy sources*, The Oregonian (Portland, OR), Apr. 10, 2000 <http://www.oregonlive.com/news/oregonian/index.ssf?/news/oregonian/00/04/lc_21power10.frame>; >; *Alternative energy sources could replace power generated by Snake River dams*, The Olympian (Olympia, WA), Apr. 11, 2000 <http://news.theolympian.com/stories/20000411/Northwest/56472 .shtml; *Clean energy sources could replace dams, study asserts*, Seattle Post-Intelligencer, Apr. 11, 2000 <http://www.seattlep-i.com/local/damm111.shtml>.

103 *See* The Oregonian (Portland, OR), Nov. 30, 1998 ("[T]he Northwest Power Planning Council estimates that since 1980, utilities have secured less than half the conservation potential that could be cost-effectively developed. . . . If Northwest utilities fully exploited the energy-efficiency opportunities out there, the cost of electricity to their customers could be reduced by more than $2 billion.").

104 *See, e.g.*, Idaho Statesman, Sept. 22, 1997 ("Breaching four dams on the Lower Snake River makes economic sense and restores an Idaho treasure. If salmon return to the state in substantial numbers--which they will if the dams are breached--the long-term benefits outweigh any short-term losses.").

In assessing the pros and cons of whether or not to remove the dams, the CTUIR has steadfastly supported the use of "good science." Admitted, this is a popular refrain, with widely different meanings. We believe there is already plenty of "good science" supporting the wisdom, necessity and practicality of such measures as breaching the four Lower Snake River dams. Unfortunately, there is evidence the federal government continues to twist and torture the science to lend support to less "politically explosive" approaches.[105]

The Draft FR/EIS should acknowledge the substantial ongoing dispute concerning "D" values. There are conflicting views on whether D is measurable, how to calculate the D value, and what the average value of D is for recent years. If a D value is used, the variation in D values has a significant implication on assessing recovery strategies.

26 Application of the extinction risk analysis is not consistent between spring and summer chinook salmon, fall chinook salmon and steelhead in the Draft FR/EIS. Extinction risk was calculated for each index stock for spring and summer chinook, but was calculated for the entire "ESU" for fall chinook salmon and steelhead. The risk of extinction for one index stock is not comparable to the extinction risk for an entire ESU. Similarly, use of the same quasi-extinction threshold for one index stock should not be used for an entire ESU (i.e., losing one index stock is not equivalent to losing an entire ESU).

The goal of the Endangered Species Act is recovery, not just prevention of near-term extinction. Given this goal, we find that the Cumulative Risk Initiative (CRI) analysis does not adequately assess recovery alternatives. It should be clearly stated in the Draft FR/EIS that assessments address minimizing near-term extinction risks and not eventual recovery. The difference needs to be clearly explained.

27, 28, 29 Modeling results do not appear to incorporate recent changes to the CRI analysis. NMFS has released updated modeling results on extinction risks and probability of decline to threshold levels. The Corps needs to clearly describe what information they are using for the Draft FR/EIS. We remain concerned about the heavy reliance on NMFS-produced modeling results in the CRI process instead of an open, multi-agency process like that in PATH. Finally, we do not support the method that NMFS is using to estimate potential survival benefits of different management actions of all Hs. We are hopeful that future scientific analysis will be a improvement over some that which we have encountered in the past, which came in for considerable criticism on both procedural and substantive grounds.

---

105 *See, e.g., Dueling science snags dam-breaching debate*," The Oregonian (Portland, OR), Dec. 26, 1999.

IX. Mitigation

Clearly, dam breaching should not take place without appropriate and timely mitigation. We readily acknowledge there will be biological, economic and social impacts. We did so in 1995; we still do today. Tribes know all too well the hardships imposed by unforeseen economic and social changes.[106] We do not wish upon non-Indian families and communities the same circumstances that tribal families and communities have endured because of the loss of salmon.[107]

Alternatives 1, 2 and would, from a cumulative effects perspective, continue to contribute to existing detrimental tribal conditions. These alternatives do not offer reasonable prospects of a restored tribal fishery for 50 years or more, if ever. Alternative 4 offers the highest rates of recovery for wild salmon and steelhead.

It may be useful to look at the situation in broader terms.

X. The Costs of Recovery--and Extinction

30 Certainly there are costs to recover salmon. Many have reaped great benefits from their destruction. Balanced against recovery costs must be the *costs* of driving them further to extinction.[108] All too, frequently, many assume that the status quo has no costs. There will be

---

106 *See* Antone Minthorn, Speech to the President's Council on Sustainable Development (Nov. 3, 1994):

> In the Treaty of 1855, our ancestors specifically protected our economic base. We never gave up our right to fish, to hunt or to gather food and medicinal plants in the lands which we ceded. Instead, we explicitly retained or reserved these rights and these resources in the Treaty. Despite the Treaty, these resources have been devastated, and as a result, our economy has been devastated as well. Right now our tribal resources overall are in a horrible condition. For over one hundred years, they were mismanaged by the federal government, which favored extraction and exhaustion over sustainability. This failure of the federal government to honor its Trust Responsibility to this Tribe and to protect our resources has left our economic base in shambles. It is hard to have a thriving economy when the basis of your economy is listed as an Endangered Species.

107 Meyer Resources, Inc., *Tribal Circumstances & Impacts from the Lower Snake River Project on the Nez Perce, Yakama, Umatilla, Warm Springs, and Shoshone Bannock Tribes* 1999. This study found that the tribes currently catch less than 10 percent of the harvest that supported them at the time of the Treaties of 1855. It also found a significant transfer of wealth from the tribes to non-tribal populations that benefit from the dams. Tribal unemployment and poverty levels are significantly higher than those of non-tribal populations. Tribal death rates are about twice as high as non-tribal death rates. Tribal per capita incomes are 40 to 70 percent below non-tribal populations.

108 *See, e.g., Let's make sure this sockeye isn't the last at Redfish Lake*, Idaho Statesman, Aug. 25, 1998 ("The fish are worth an estimated $150 million to Idaho's economy, especially in hard-pressed rural towns. In Salmon . . . residents lament the loss of a once-thriving fishing industry that drew anglers and

30 cont.

costs if we don't breach the dams. There will be further non-compliance with the federal Clean Water Act and other statutes, for example, if the dams remain intact. Other costs may include even harsher restrictions in tributary habitat and more water from Idaho. They would include dishonored treaties and potential tribal claims for infringement of our rights. Unfortunately, the Draft FR/EIS generally overestimates the costs and negative consequences of breaching, and underestimates the financial and other benefits that will come with a restored river and restored fish.

31, 32

We agree with those who say we there needs to be a human face on the salmon recovery debate. For far too long, for too many years, tribes and many others have seen all too well, and much too often, the human face on our *failure* to recover and restore salmon. We've seen it in the faces of our tribal elders, when they've come to us to ask, "Where are the salmon for our ceremonies--our feasts, our funerals, our births, our Sabbath?" We've seen it in the faces of our children, when they've come to us to ask, "What was it like to fish at Celilo, to fish in our nearby rivers and streams?" We've seen it in the faces of the non-Indian fishermen and their families, and the many communities that depended on them, all up and down the Columbia and along our coasts. It's time that we recognized the human face of salmon *extinction*.[109]

Dam removal will create new jobs. Benefits currently provided by the dams can be replaced.[110] The Alaska Department of Fish and Game has offered the following assessment of the economic aspects of the Draft FR/EIS:

---

tourists. 'There used to be over 20 tackle shops between here and Stanley,' Jack Cook, owner of the Silver Spur Sports Shop [said]. 'Now they're all gone.'").

109 *See Let's make sure this sockeye isn't the last at Redfish Lake*, Idaho Statesman (Boise, ID), Aug. 25, 1998 ("The fish are worth an estimated $150 million to Idaho's economy, especially in hard-pressed rural towns. In Salmon . . . residents lament the loss of a once-thriving fishing industry that drew anglers and tourists. 'There used to be over 20 tackle shops between here and Stanley,' Jack Cook, owner of the Silver Spur Sports Shop [said]. 'Now they're all gone.'")

110 *See, e.g.*, Peggy Andersen, *Report says dam breaching could help NW economy*, The Spokesman-Review (Spokane, WA), Nov. 5, 1999 <http://www.spokane.net/news-story.asp?date=110599&ID=s655254>:

> A private study for Northwest environmental groups concludes that bypassing four lower Snake River dams to help migrating salmon would lead to long-term economic benefits for the Pacific Northwest. . . . The report by the Eugene, Ore.-based economic consulting firm ECONorthwest is based on preliminary data gathered by the U.S. Army Corps of Engineers' Drawdown Regional Economic Workgroup, or DREW. . . "DREW to date has seriously underestimated the economic benefits of bypassing the dams," a news release accompanying the report said. According to the ECONorthwest study, bypassing the dams would:
> * Create 12,000 temporary jobs during the nine-year bypass phase. The loss of 1,192 to 1,651 jobs held by dam operators could be offset through worker-retraining programs.
> * Create employment opportunities and other benefits for regional Indian tribes and prevent costly compensation for unmet treaty obligations due to dwindling salmon runs.
> * Increase salmon populations, benefiting commercial fishing.

The science points to removing the dams as a necessary condition to recovery of these species. The economic analysis should assist with the policy decision, taking into account the science as well as the effects on people of various alternatives. The draft economic analysis, although a hefty document, has several deficiencies that should be addressed in the final document. Of utmost concern is that the economic analysis compares alternatives that have widely differing possibilities of success in achieving the goal of meeting Endangered Species Act requirements for listed Snake River salmon and steelhead. A modified Alternative 4 . . . appears to be the only alternative that meets the ESA requirements for Snake River salmon and steelhead. An economic analysis comparing an alternative that complies with federal laws with three that do not is an unsound comparison. As a 1999 study by the National Research Council (NRC) of the Corps' *Policies and Guidelines* states, any "alternative that does not meet environmental criteria and regulations even though it may maximize monetary benefits cannot be implemented" (New Directions in Water Resources Planning for the U.S. Army Crops of Engineers, p. 4). Regarding the specifics of the economic analysis, ADF&G notes that the Economic Appendix estimates qualitative considerations such as passive use values for both increased salmon and a free-flowing river. However, these values are not included in the National Economic Development (NED) costs and benefits analysis display table (Table 1 in the Summary document) or in the overall economic picture in some other comprehensive fashion. Furthermore, at public hearings the slide detailing the outcome of the cost-benefit analysis omitted the passive use values determined by the Corps and presenting participants with an incomplete economic picture of the costs and benefits of the alternatives. The Draft FR/EIS states that passive values are not included in the NED and mentions the controversy in measuring passive values. Simply stating that these qualitative considerations are not included in the NED, however, does not relieve the Corps from their responsibility of including them. Moreover, it is questionable if the Corps should have included any cost-benefit analysis that does not include qualitative considerations, as 40 CFR Sec. 1502.23 provides, "[t]he weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and *should not be* when there are important qualitative considerations [emphasis added]. ADF&G believes that these passive values are important qualitative considerations and should be included in the Final FR/EIS cost-benefit analysis of the alternatives, in order to give them some weight in the economic measurements of the various alternatives. By doing so, the Corps will provide the public and decision makers with a more robust estimate of the costs and benefits of each alternative. For example, if the Corps was to use conservative estimates, such as the

33

* Create 3,100 recreation-related jobs in the 20 years following the nine-year breaching process, worth about $200 million in sales per year.
The study also says irrigation water lost to 13 farm operations could be replaced by extending existing wells, investing in irrigation infrastructure and other moves. Though bypassing the dams would eliminate the barge channel and increase transportation costs by about $18.6 million annually, the report says a shipping program would offset those costs and create 236 jobs in the rail and trucking industries.

33 cont.

lowest passive value they determined for a free-flowing lower Snake River ($66 million per year) and half the passive value for endangered salmon and steelhead stocks ($210 million per year) calculated in the Economic Appendix (pp. I4-1 to I4-8), a passive value of $276 million per year would result. Including this qualitative consideration in the cost-benefit analysis of the alternatives would result in a substantially more favorable cost-benefit analysis of Alternative 4. The NCR Report supports the idea of the Corps including more of the recent economic thinking into their studies. The NCR suggests that the *Principles and Guidelines* for Corps economic analyses are lacking and that the Corps needs to expand NED calculations because "strict adherence to the NED account may discourage consideration of innovative and nonstructural approaches to water resources planning (p. 4)." Another concern with the economic analysis presented by the Corps is that the baseline for the economic analysis relies on conditions existing today. With this baseline, the Corps fails to take into account economic restrictions that are currently in place and have been for several years, such as reductions in fish harvest due to restrictions to assist with recovery of Snake River salmon. These reductions have already resulted in continuing economic losses for fishermen. This omission should be remedied in the Final FR/EIS.[111]

Much has been spent on salmon recovery. It may be more accurate to say that much has been mis-spent.[112] Too much has been spent on technological fixes that haven't worked.[113] The tribes

---

111 Office of the Commissioner, Alaska Department of Fish and Game, *Comments on the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement*, Mar. 30, 2000 <http://www.state.ak.us/local/akpages/FISH.GAME/geninfo/hot/esr/deiscom.htm>.

112 The tribes continue to debate the Corps' priorities and budgets on an annual basis. The CTUIR, the other Treaty Tribes and CRITFC place a high priority on projects that support the presumptive path of breaching the four lower Snake River Dams within the next ten years. Costs of projects advocated by the tribes is nearly identical to the cost of "goldplating" the lower Snake Dams with passage "fixes" of questionable utility proposed by the Corps. We also greater emphasis on measures to bring the dams into compliance with the Clean Water Act for dissolved gas and temperature. For example, our priorities include funds to implement spillway deflectors at Chief Joseph Dam; the Corps does not share that priority. Overall, our proposed budget exceeds the Corps by about $8 million for FY 2001. The Corps continues to devote a large percentage of its budget toward turbine screen system and juvenile salmon transportation projects, despite independent biological evaluations indicating that screens and transportation select against salmon diversity and reduce overall productivity. We also place a high priority on adult passage improvements, consistent with the recommendations of the Independent Scientific Advisory Board (ISAB). We have proposes about twice as much for adult passage as the Corps. A key area of concern for Columbia River Basin tribes in areas blocked by large dams is investigation of engineering methods for adult passage over these high head dams. The Corps does not dedicate any funds to these investigations. For the first time, the Corps has dedicated funds from the Columbia River Fish Mitigation Program to activities beyond the scope of system configuration changes for the federal hydroprojects.

113 Surface collectors and bypass systems are one technological approach worthy of some additional investigation, yet they remain problematic in some respects. *See* Office of the Commissioner, Alaska

are not anti-technology. We are not slaves to it, either. It must assume its proper role in saving salmon. Combined with common sense, it can serve us well.

XI. Supplementation, Habitat Restoration - and Success in the Umatilla River

34 As part of the Umatilla Basin Project, the CTUIR has restored salmon in the Umatilla River after they had been erased for over 70 years. We did this by working cooperatively with the state and federal governments, and affected stakeholders in the Basin. We didn't rely on just hatchery supplementation, however. The other key element was restoring a portion of the habitat--the Umatilla River itself. In our watershed, both supplementation and habitat restoration were essential. The tribes hope to repeat such successes throughout the Columbia River Basin.[114]

XII. Conclusion

35, 36, 37 In the Draft FR/EIS on "Early Snake Explorations," the land at the lower Snake River is described as a "bleak, dreary waste." The notion of subjugating natural streams to the will of mankind is also reiterated. Unfortunately, this was probably the prevailing view of the time, and has led in large part to the problems we face today.[115] Even earlier federal policy reflected this

---

Department of Fish and Game, *Comments on the Draft Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement*, Mar. 30, 2000 <http://www.state.ak.us/local/ak pages/FISH.GAME/geninfo/hot/esr/deiscom.htm> ("To date, the prototype installation of Alternative 3 bypass systems is still in development and collection/bypass goals have not been met.") Letter from the Northwest Power Planning Council (Oct 26, 1998) ("In their report on surface bypass systems [Independent Scientific Advisory Board Report 98-7, on the U.S. Army Corps of Engineers' Columbia River Fish Mitigation Program], the scientists concluded that over 20 years of work to improve turbine intake screen technology has yet to result in a turbine intake screen that can achieve the 80 percent fish passage efficiency standard for all species and stocks. . . . [S]ubstantial uncertainties remain regarding the level of changes in survival of juvenile salmon that can be provided by surface bypass facilities . . .").

114 *See, e.g.*, Rocky Barker, *Idaho Nez Perce try strategy to restore wild chinook runs*, The Oregonian (Portland, OR), Apr. 23, 2000 <http://www.oregonlive.com/news/oregonian/index.ssf?/news/ oregonian/ 00/04/nw_11fish23.frame>.

115 Thankfully, not everyone has shared this view. *See, e.g.*, Roderick Haig-Brown, *A River Never Sleeps* (1946):

> I have said that the Pacific salmon runs are probably the most spectacular natural resource on the face of the earth. Their greatness is less than it once was, but even today this annual movement of million upon millions of great gleaming fish through the length and breadth of the continental shelf toward their spawning in the high tributaries is a tremendous thing. The salmon runs, more surely and easily than almost any other resource, can be made to last and serve indefinitely, can ever be grown back to, or beyond, their full glory. . . . And there will be salmon and more salmon to complete this cycle so long as they are allowed to enter the rivers to their spawning in sufficient numbers, so long as the way to the spawning beds is kept clear and easy and open and so long as the rivers are kept clean and fresh and pure. It is as simple as that.

abysmal attitude.[116] The tone of this section is biased towards river development and clashes with the tribal view of living in harmony in nature.

35, 36, 37 cont.

FCRPS activities and operations, and their impacts on the Columbia and Snake Rivers, their tributaries and watersheds, are matters of great importance to the CTUIR. Hydrosystem facilities and functions directly affect our Treaty Rights, our Treaty-reserved resources and other rights and resources not explicitly ceded to the federal government in the Treaty of 1855. These rights and resources and not merely relics of the distant past, but are a priceless part of our living heritage. Salmon are the centerpiece of our culture, religion, spirit, and, indeed, our very existence. Their role and importance to the CTUIR and its members cannot be overestimated. We honor the salmon. We fish for salmon at Celilo and at our other usual and accustomed sites on the mainstem and in the tributaries, as we have done for thousands of years. As Indians, we speak solely for the salmon. Our people's desire is simple--to preserve the fish, to preserve our way of life, now and for future generations.

The federal government must honor its promises to the CTUIR and begin to *recover and restore* salmon. A return to sustainable, healthy and harvestable populations of fish, wildlife plants and other resources and the protection of our Treaty Rights should be the principal yardstick for selecting the preferred alternative and finalizing the FR/EIS.

Our salmon harvest never triggered any extinctions. We managed the runs successfully, providing for sustainable populations of both fish and people. We did so long before there was the possibility that others could "manage" the work of the Creator into oblivion. This critically important resource--central to our economic and spiritual well-being--is now in danger of disappearing from our homeland, leaving it--and all of us--barren, empty and poorer than before. To preserve the salmon, we must listen to the scientists, and thoughtfully weigh their insight. We must listen to our elders, and learn from the wisdom they have gained. If we turn a deaf ear to them now, the day may come when our children are listening to us, anxiously awaiting an answer to their question: "What did you do to save the salmon?"

---

116 *See, e.g.*, BPA Currents, July 25, 1947 ("The Department [of the Interior] agrees that interests of the Columbia River fisheries should not be allowed indefinitely to retard full development of the other resources of the river. It concludes moreover that the overall benefits to the Pacific Northwest from a thorough going development of the Snake and the Columbia are such that the present salmon run must, if necessary, be sacrificed."); Office Memorandum from Samuel J. Hutchinson, Acting Regional Director, Bureau of Commercial Fisheries (predecessor to NMFS), (Jan. 16, 1951) ("[T]he beneficial effects [of The Dalles Dam] would compensate for the detrimental conditions that exist there at present. In brief, it would be easier for the fish to go over a ladder in the dam than to fight their way over Celilo Falls. The Indian commercial fishery would be eliminated and more fish would reach the spawning grounds in better condition. . . . [Referring to Priest Rapids Dam,] it would eliminate the red salmon runs going into the upper Columbia. . . . [W]e have little if any objections to Hells Canyon Dam.").

Thank you for your consideration of our comments. Should you have any questions or wish to discuss any of these matters, further, please feel free to contact me, or Carl Merkle, Salmon Recovery Policy Analyst, CTUIR Department of Natural Resources, at (541) 276-3449.

Sincerely,

Jay Minthorn
Chairman, Fish and Wildlife Committee
Member, Board of Trustees

JM: DNR: cm